

Sequence Listing

<110> Lightfoot, David

Meksem, Khalid

<120> ISOLATED POLYNUCLEOTIDES AND POLYPEPTIDES RELATING TO LOCI UNDERLYING RESISTANCE TO SOYBEAN CYST NEMATODE AND SOYBEAN SUDDEN DEATH SYNDROME AND METHODS EMPLOYING SAME

<130> 1268/4/2

<150> 60/178,811

<151> 2000-01-28

<160> 122

<170> PatentIn version 3.0

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<212> DNA

<213> soybean

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cataaatgca ttatgaagaa ttgtaacggc tgtgtttttg gacttcttca aaaagtttat
2820

gttattgcc a ggtgtatata tcaacatggt ttaaagattt tcaaacaatc aggttttaga
2880

tgtggggttg catgcatgag attggactag tgcgcttgat gtagtataaa atataaattg
2940

tccaatcaag caccctctac atgtccaaat aatgggcctt atgaaactta attttttaat
3000

tacaaactac agtaatcttt ttgaataaag atttaciaat tacaacngac atgtgaagcn
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gcattctttna ttgncaatct ttcaagttac tctattattt tctgcn
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<210> 14

<211> 830

<212> PRT

<213> soybean

<220>

<221> misc_feature

<223> X is any amino acid

<400> 14

Asn Gly Arg Ser Gly Lys Asp Ser Gly Tyr Gly Ala Cys Ser Gly Gly
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Trp Val Gly Ile Lys Cys Ala Gln Gly Gln Val Ile Val Ile Gln Leu
20 25 30

Pro Trp Lys Gly Leu Arg Gly Arg Ile Thr Asp Lys Ile Gly Gln Leu
35 40 45

Gln Gly Leu Arg Lys Leu Ser Leu His Asp Asn Gln Ile Gly Gly Ser
50 55 60

Ile Pro Ser Thr Leu Gly Leu Leu Pro Asn Leu Arg Gly Val Gln Leu
65 70 75 80

Phe Asn Asn Arg Leu Thr Gly Ser Ile Pro Leu Ser Leu Gly Phe Cys
85 90 95

Pro Leu Leu Gln Ser Leu Asp Leu Ser Asn Asn Leu Leu Thr Gly Ala
100 105 110

Ile Pro Tyr Ser Leu Ala Asn Ser Thr Lys Leu Tyr Trp Leu Asn Leu
115 120 125

Ser Phe Asn Ser Phe Ser Gly Pro Leu Pro Ala Ser Leu Thr His Ser
130 135 140

Phe Ser Leu Thr Phe Leu Ser Leu Gln Asn Asn Asn Leu Ser Gly Ser
145 150 155 160

Leu Pro Asn Ser Trp Gly Gly Asn Ser Lys Asn Gly Phe Phe Arg Leu
 165 170 175
 Gln Asn Leu Ile Leu Asp His Asn Phe Phe Thr Gly Asp Val Pro Ala
 180 185 190
 Ser Leu Gly Ser Leu Arg Glu Leu Asn Glu Ile Ser Leu Ser His Asn
 195 200 205
 Lys Phe Ser Gly Ala Ile Pro Asn Glu Ile Gly Thr Leu Ser Arg Leu
 210 215 220
 Lys Thr Leu Asp Ile Ser Asn Asn Ala Leu Asn Gly Asn Leu Pro Ala
 225 230 235 240
 Thr Leu Ser Asn Leu Ser Ser Leu Thr Leu Leu Asn Ala Glu Asn Asn
 245 250 255
 Leu Leu Asp Asn Gln Ile Pro Gln Ser Leu Gly Arg Leu Arg Asn Leu
 260 265 270
 Ser Val Leu Ile Leu Ser Arg Asn Gln Phe Ser Gly His Ile Pro Ser
 275 280 285
 Ser Ile Ala Asn Ile Ser Ser Leu Arg Gln Leu Asp Leu Ser Leu Asn
 290 295 300
 Asn Phe Ser Gly Glu Ile Pro Val Ser Phe Asp Ser Gln Arg Ser Leu
 305 310 315 320
 Asn Leu Ser Asn Val Ser Tyr Asn Ser Leu Ser Gly Ser Val Pro Pro
 325 330 335
 Leu Leu Ala Lys Lys Phe Asn Ser Ser Ser Phe Val Gly Asn Ile Gln
 340 345 350
 Leu Cys Gly Tyr Ser Pro Ser Thr Pro Cys Leu Ser Gln Ala Pro Ser
 355 360 365
 Gln Gly Val Ile Ala Pro Pro Pro Glu Val Ser Lys His His His His
 370 375 380
 Arg Lys Leu Ser Thr Lys Asp Ile Ile Leu Ile Val Ala Gly Val Leu
 385 390 395 400
 Leu Val Val Leu Ile Ile Leu Cys Cys Val Leu Leu Phe Cys Leu Ile
 405 410 415
 Arg Lys Arg Ser Thr Ser Lys Ala Gly Asn Gly Gln Ala Thr Glu Gly
 420 425 430
 Arg Ala Ala Thr Met Arg Thr Glu Lys Gly Val Pro Pro Val Ala Gly
 435 440 445
 Gly Asp Val Glu Ala Gly Gly Glu Ala Gly Gly Lys Leu Val His Phe
 450 455 460

Asp	Gly	Pro	Met	Ala	Phe	Thr	Ala	Asp	Asp	Leu	Leu	Cys	Ala	Thr	Ala	
465					470					475					480	
Glu	Ile	Met	Gly	Lys	Ser	Thr	Tyr	Gly	Thr	Val	Tyr	Lys	Ala	Ile	Leu	
				485					490					495		
Glu	Asp	Gly	Ser	Gln	Val	Ala	Val	Lys	Arg	Leu	Arg	Glu	Lys	Ile	Thr	
			500					505					510			
Lys	Gly	His	Arg	Glu	Phe	Glu	Ser	Glu	Val	Ser	Val	Leu	Gly	Lys	Ile	
		515					520					525				
Arg	His	Pro	Asn	Gly	Leu	Ala	Leu	Arg	Ala	Tyr	Tyr	Leu	Gly	Pro	Lys	
	530					535					540					
Gly	Glu	Lys	Leu	Leu	Val	Phe	Asp	Tyr	Met	Ser	Lys	Gly	Gly	Leu	Leu	
545					550					555					560	
Leu	Phe	Tyr	Met	Glu	Gly	Ser	Cys	Ala	Gly	Ser	Phe	Ile	Lys	Val	Leu	
				565					570					575		
Cys	Val	Leu	Val	Phe	Asn	Tyr	Asn	Leu	Glu	Phe	Tyr	Leu	Ser	Asn	Leu	
			580					585					590			
Tyr	Asn	Ser	Asn	Arg	Arg	Thr	Val	Gln	Thr	Lys	Thr	Pro	Lys	Glu	Gln	
		595					600					605				
His	Leu	Xaa	Phe	Asn	Ile	Pro	Tyr	Gln	Xaa	Ser	Glu	Ile	Phe	Ser	Trp	
	610					615					620					
Ser	Ser	Xaa	Cys	Arg	Gly	Asn	Xaa	Thr	Phe	Ile	Ile	Gly	His	Lys	Met	
625					630					635					640	
Lys	Ile	Xaa	Gln	Asp	Leu	Ala	Val	Ala	Cys	Ser	Pro	Ser	Phe	Pro	Glu	
				645					650					655		
Thr	Ser	Tyr	Met	Asp	Leu	Xaa	Ser	Ser	Asn	Val	Cys	Xaa	Xaa	Asn	Xaa	
			660					665						670		
Met	Leu	Lys	Leu	Gln	Phe	Trp	Ser	Phe	Ser	Val	Asp	Val	Asn	Cys	Cys	
		675					680					685				
Xaa	Phe	Gln	Arg	Asp	Ser	Tyr	Ser	Trp	Ser	Ile	Gly	Ile	Pro	Gly	Thr	
	690					695					700					
Xaa	Ala	Leu	Lys	Ala	Gln	Glu	Ser	Lys	His	Xaa	Asn	Xaa	Tyr	Leu	Gln	
705					710					715					720	
Ser	Trp	Cys	Tyr	Leu	Val	Arg	Thr	Pro	Asn	Glu	Glu	Ile	Thr	Trp	Gly	
				725					730					735		
Val	Tyr	Glu	Trp	Thr	Arg	Phe	Ala	Ser	Val	Gly	Cys	Leu	Ser	Cys	Gln	
			740					745					750			
Arg	Gly	Val	Asp	Lys	Xaa	Gly	Phe	Xaa	Cys	Arg	Leu	Asp	Glu	Arg	Cys	
		755					760					765				

Ile His Ser Trp Arg Arg Val Ala Lys His Val Glu Ala Arg Phe Ala
 770 775 780

Leu Cys Xaa Ser Phe Ser Ile Ser Thr Thr Arg Ser Ser Ser Ser Ser
 785 790 795 800

Pro Ala Ala Gly Arg Asp Xaa Thr Arg Glu Ile Ser His Ser Gln Ser
 805 810 815

His Leu Pro Gly Arg Pro Leu Glu Pro Tyr Ser Glu Ser Tyr
 820 825 830

<210> 15
 <211> 726
 <212> DNA
 <213> soybean
 <220>
 <221> promoter_region
 <222> (1)..(726)
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 15
 gaatacgaat tccattttcg cgacagtagc tcagaatagg ttcatactcc tgccatcttt
 60

gaggcggnc aatgcaacgtg taagacttca aggtgtctcc atctatcctg ccatgaaagt
 120

caagtttcag gacaagtaat gcagaattat ggaaaagcaa tctgactaag acaaaagagc
 180

ttcagagatt aacagaaaaat agtgagccag aaaaaagatt gcgagacaga aattgggtcgc
 240

caacaaaaag ttgtctcttt tataattttt aattgaaatt ttcttaattt agctaacatg
 300

acttctctacg gccacaattg cgtttgcaga cacttaaaaa acttgatggt gcagcaaaaa
 360

tcacgtttta tttattattg atgtcaatta ttaacagtt ttatgttagg ttaataaaca
 420

gtaggttgat gcaagaggct aaacattaat cagaaattga aaggcagggn tattacttct
 480

tatccatata ctgattgagc gggtcctgaa gaatagcggg aaaaacttca agcgccagag
 540

acaatagttt tttcttttca aacagcgcct atgcaaattc ttccaatctc aagcttcaat
 600

tcctatcgtc tcgaaccgga cttgntctgn ttnacctaaa tccccactcg gcattnatna
 660

acttntcccc acttttccttt ntcttttcta tggccaccgg tcttctatnc ccgcccgtcg
720

naatct
726

<210> 16
<211> 649
<212> DNA
<213> soybean
<220>
<221> partial_cDNA
<222> (1)..(648)
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 16
aggagtggga aagacagtgg ctatggagct tgttccggag gttgggttgg aatcaagtgt
60

gctcagggac aggttattgt gatccagctt ccttgggaagg gtttgagggg tcgaatcacc
120

gacaaaattg gccaaacttca aggcttcagg aagcttagtc ttcattgataa ccaaattggg
180

ggttcaatcc cttcaacttt gggacttctt cccaacctta gaggggttca gttattcaac
240

aataggetta caggttccat acctctttct ttaggtttct gccctttgct tcagtctctt
300

gacctcagca acaacttgct cacaggagca atcccttata gtcttgctaa ttccactaag
360

ctttattggc ttaacttgag tttcaactcc ttctctgggc ctttaccagc tagcctaact
420

cactcatttt ctctcacttt tctttctctt caaaataaca atctttctgg ctcccttctt
480

aactcttggg gtgggaattc caagaatggc ttcttttaggc ttcaaaattt gatcctagat
540

cataactttt tcaacttgga cgttcctgct tctttgggta gcttaagaga gctcaatgag
600

aattccctta agcataataa ggtagggga gctatcccaa atgaaatnt
649

<210> 17
<211> 558
<212> DNA
<213> soybean
<220>
<221> partial_cDNA
<222> (1)..(558)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 17
 aggantgggn aagacantgg ctatttttagc tttgggtcccg gaggggtgggt tggaatcaan
 60

tgngctcaag gacaaggtat tgtgaaccaa cttnccttga aaggnttgag ggggcgaaac
 120

accacaaaa atgggcaact tnaaagnctc angaagctta atcttnatga aaacaaaaat
 180

gggggggtcaa anccntcaac ttttggactt ctttccaacc ttagaggggg tcaattattc
 240

aacaataggn ttacagggtc catacctctt tctttaaggt tctgcccttt gnttcagnct
 300

cttgacctca acaacaactt gctnacagga agcaatccct tatagtcttg ctaattccac
 360

taagctttat tggcttaact ttgagnttca actnctttct ntgggncttt accaactagn
 420

ctaactcact cattttctct cacttttttt tntnttttaa aaaacaaaca tttntngntt
 480

cccttctnac tcntgggggg gggaaaaaca annaaaggnt tcttttagnt tcaaaaaatg
 540

atcctanaac ataacttt
 558

<210> 18

<211> 794

<212> DNA

<213> soybean

<220>

<221> partial_cds

<222> (1)..(794)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 18

aatgggagga gtgggaaaga cagtggctat ggagcttggt ccggagggtg ggttggaatc
 60

aagtgtgctc agggacaggt tattgtgate cagcttcctt ggaagggttt gaggggtcga
 120

atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa
 180

attggtgggt caatcccttc aactttggga cttcttccca accttagagg ggttcagtta
 240

ttcaacaata ggcttacagg ttccatacct cttctcttag gtttctgccc tttgcttcag
 300

tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc
360

actaagcttt attggcttaa cttgagtttc aactccttct ctggccttta ccagctagcc
420

taactcactc attttctctc acttttcttt ctcttcaaaa taacaatctt tctggctccc
480

ttcctaactc ttggggnggg aatttcaaga atggcttctt taggcttcaa aatttgatcc
540

tagatcataa cttttttnctg gtgacgttcc tgcttctttg ggtagcttaa gagagccna
600

tgagaattcc cttagtcatn ataagnttag tggagctttc caantgaaat anggaccct
660

tntaggetta aacactngnc attctaataa tgccttgaat gggaacctcc ctgttccctc
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tttanttac tcccttnenc ngctggangc cagaccacn cntgncaatn aatccctcaa
780

agttaggtac atcg
794

<210> 19

<211> 781

<212> DNA

<213> soybean

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<221> partial_cds

<222> (1)..(781)

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 19

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60

gtgctcaggg acaggttatt gtgatccagc ttcottggaa ggggtttgag gggtcgaatc
120

accgacaaaa ttggccaact tcaaggcctc aggaagctta gtcttcatga taaccaaatt
180

ggtgggtcaat ccttcaact ttgggacttc ttccaacctt agaggggttc aagttattca
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acaataggct tacaggttcc atacctcttt ctttaggttt ctgccctttg cttcaagtct
300

cttgacctca gcaacaactt gctcacagga gcaatccctt atagtcttgc taattccact
360

aagctttatt ggcttaactt gagtttcaac tnccttctctg gncctttacc agctagccta
420

actcaactcat tttctctcac ttttctttct cttcaaaaaa acaaactttc tgggtccttt
480

ctactcttgg ggggggaatt ccagaatggn ttcttttaggg ttnaaaattg atcctagaca
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tactttttac tggggacgtc ctgcttcttt ggnagcttaa agagctcaat gagattncct
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tagcataata agttaggggg gctttnccaa agnaatagga ncctttntag ggttaaaaac
660

ctggcatttt taaaatgcct tgaangggac ttgnccgctn cccctntaat tatccncctt
720

acnccgntgg anggagagaa aancccttg caaanaaaac cctcaaaggt tagggngatc
780

g
781

<210> 20

<211> 861

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 20

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caagtgtgct caggacaggt ttattgtgat ccagcttctt tggaagggtt tgaggggtcg
120

aatcacccgac aaaattggcc aacttcaagg cctcaggaag cttagtcttc atgataacca
180

aattggtggt tcaatccctt caactttggg acttcttccc aaccttagag gggttcagtt
240

attcaacaat aggcttacag gttccatacc tctttcttta ggtttctgcc ctttgcttca
300

gtctcttgac ctcagcaaca acttgctcac aggagcaatc ccttatagtc ttgctaattc
360

cactaagctt tattggctta acttgagttt caactccttc tctggctcct taccagctag
420

cctaactcac tcattttctc tcacttttct ttctcttcaa aataacaatc tttctggctc
480

ccttcttaac tcttgggggtg ggaattccaa gaatggcttc tttaggcttc aaaatttgat
540

cctagatcat aactttttca ctggtgacgt tcttgcttct ttgggtagct taagagagct
600

caatgagatt tcccttagtc ataataaagt ttaatggagc tataccaaat gaaataggaa
660

ccctttctan gcttaaacac ttgacatttn taataatgnc ttgaatggga acttgctgc
720

tacctctnt aattatcctn cttacactgn tgaatgcaaa aaacaacctc ttgcaataaa
780

tcccttaaan ttangnnaat gggaaanttn tttntgattt gagtnaaacc aattaatggc
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atattnttta acatttaaan t
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<210> 21

<211> 761

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 21

gaatgggagg agtgggaaag acatgggggt gaagggtgt acccacatag ttgaatattt
60

cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg
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ctattgtagg aaacattgaa gggatttaga ctgcgctgac tgtcaaagga gactggaatt
180

tctccactga aattattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcaatg
240

cttgaaggaa tatgtccact aaattgggtt ctactcaaaa tcagaacaga aagattacgc
300

aatctaccta aactttgagg gatttgattg tcaaggaggt tgttctctgc attcagcagt
360

gtaagtgagg ataaattaga gagggtagca ggcaagttcc cattcaaggc attattagaa
420

atgtcaagtg tcttaagcct anaaagggtt cctatttcat ttggtatagc tcctaaact
480

tattatgact aagggaatc tnattgagct cntttaactc ccaaagaaca ggacgtacca
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gtgaaaaagt atnatctagg atcaaatttg aacctaaaaa gcattttgga tccccccaaa
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gtaggaagga gcanaagatg tntttnaaaa anaaatanaa aatatagtag tactgtaagc
660

naaaagggtga ctaatagcat aantatgata caaattagga tttcttanaa ttttttnnaa
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aatnnnangn aaccaaaaaa gngacntncn tttnaanacc c
761

<210> 22

<211> 856

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 22

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aagtgtgctc agggacaggt tattgtgac cagcttcctt ggaagggttt gaggggtcga
120

atcaccgaca aaattggcca acttcaaggc ctcaggaagc ttagtcttca tgataaccaa
180

attggtgggt caatcccttc aactttggga cttcttccca accttagagg ggttcagtta
240

ttcaacaata ggcttacagg ttccatacct ctttcttttag gtttctgcct ttgcttcaag
300

tctcttgacc tcagcaacaa cttgctcaca ggagcaatcc cttatagtct tgctaattcc
360

actaagcttt attggcttaa cttgagtttc aactccttct ctggtccttt accagctagc
420

ctaactcact catTTTTctt cacttttctt tctcttcaaa anaacaatct ttctggctcc
480

cttcctaact cttgggggtg gaattccaag aatggcttct ttaggcttca aaaattgac
540

ctagaacata acttttttac tggtgacgtt cctgcttttt ttggtaggct taaaganaag
600

ccaatgagaa tttccttagt catnataaag ttaaggggag ctttttnccaa atgaaaaaag
660

gaaccctttn taggcttaaa nanacttgac aattntaat aatgcccttg aatngggaac
720

ttgcctgcta cccctttaa tttatcctac ttaccctgnt ngaaggcaaa naacaacccc
780

tttgcaataa aaaccnnaaa gttaagggga angnggnact ttntntctnn tttngggnaa
840

accanttann ggcncct
856

<210> 23
<211> 826
<212> DNA
<213> soybean
<220>
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<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 23
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60

cccacaaatg agcttgagtt aaatttcttg gcaagcagag gggggacaga acctgagagg
120

ctattgtagg aaacattgaa gggatttaga ctgcgctgac tgtcaaagga gactggaatt
180

tctccactga aattattcag tgacaaatca agctgcctaa gcgaggaaat gtttgcaatg
240

cttgaaggaa tatgtccact aaattggttt ctactcaaaa tcagaacaga aagattacgc
300

aatctaccta aactttgagg gatttgattg tcaaggaggt tggtctctgc attcagcagt
360

gtaagtgagg ataaattaga gagggtagca ggcaagttcc cattcaaggc attattagaa
420

atgtcaagtg tcttaagcct agaaagggtt cctatttcat ttggtatagc ttcactaaac
480

ttattatgac taanggaaat ct cattgagc tctcttaagc tacccaaaga agcaggaacc
540

gtcaccagtg aaaaaagtta tgatctagga tcaaattttg aacctaaaaa accattcttg
600

gaattccacc ccaagaatta ggaagggagc canaaagatt gttattttga aaaaaaaga
660

aaagtgagaa aaaatgagtg agttaggctt actggtaaaa ggaccaaaaa aaggantttg
720

aaactnaaan ttaanccaat aaaacttaat ggnaataaca aanactttta nggaattctc
780

ttttnaacaa attnttnctt angncaaaaa anttaancaa aggnct
826

<210> 24
 <211> 571
 <212> DNA
 <213> soybean
 <220>
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 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 24
 tgggactggc tgtgactgat ctctctgggc taatctcttc cagctgctgg agaacttgat
 60

gaacttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt
 120

ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat
 180

ttgtccactc ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag
 240

acaccccagg tgatttcctc gttaggagtt ctaacaagat aacaccaaga ctgtagatat
 300

cagttttagt gtttgctttc ttgagctttg agagctcagg tgcccgggtat cccaatgctt
 360

cagctgtagc tatcacgttg gaattagcag cagttgacat caaccgagaa agacccaaaat
 420

ctgcaatttt agcattttna ttctcattaa acaacacaat gntggatgng anggtncat
 480

ggatgaaggt cttctnggna agnaagnaaa acaaagcacc gggccaaggn ttgggctaata
 540

ttcaaccttg gggggcaaac naanaaatgt t
 571

<210> 25
 <211> 727
 <212> DNA
 <213> soybean
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 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 25
 ttacaactag tggtatcgga gaatgaaaaa ttgaagaata ataagttcag ctataataaa
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ctcgagggag gaaaaacaaa gaaattcatg ataaatagat ataacttatt aaattttaagg
 120

ggtgtatttg cacaccctga attatagaga ttcttatatc tttgagaaaa taatttaaatt
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gggaaaaaag agataatgac tgattgagat ttgcctcaga attgttcggt ttaatatagg
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tacgaatcta atggttttat cctgaaagat gtcacaagt attgagggac taataaattg
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tttataaact actactaaat gagatgagac ttttaagggtg actgaagcaa tatcatttaa
360

aaaatgacta ctcgattttg tgttgagaaa atttattttc aatgaaaaga aaatatatac
420

atataagata aagtaattaa cataaccgaa aggaaataaa atgcaacatt ataaaaacta
480

caactatata aatgatatat acaactccta gcacatgcat tggattgtga attaattaaa
540

atgttgtatg gatggtaaaa attcaaaaact aaacccccca caatttaagt gacacagaat
600

ataattagcg gtggtotttt tacagaaacg acgagaacaa aggtgtcaaa ggaaaggaga
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tggatgcatg tggatgagc tcatncaatt ccaacctgtt gtggacccaaa gccgaagtcc
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ttgacnn
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<210> 26

<211> 560

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 26

attacgcnag ctctatacga ctactatag ggagacaagc ttgcatgcct gcaggtcgac
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tctagaggat ccccggttac cgagctcgaa ttcccaatgc cagagcttcc ctatcgtggg
120

ccccacctat gaagaataca ccacggtga aatacatgtt gttgttggtg gacgcgcccc
180

gccgagagtg ccggtccaag agtatcccca acgtgcatgg cgcacgcgct tgaaacctag
240

tattcatctt cctgatggag gcagccacgt gtccgacaag gtcaatgttg ccgttttcgt
300

gaaaagggat gataatgaaa ggcaccatat tgtcttgggc gaggttgaaa atggcgtcgt
360

gcattgctctt gtaagggtgcc acgttgatgt aggggaagaac cttgactggc ccacttgagt
420

tgttgaggta gttttcgaag gcttgcattga tgtgggttggg gttgggggtaa ttcacagaca
480

agaattttct gngaccctg tctatgtttt atgggaagga gaatgggtgc cttttcccca
540

cnagctngat nagngggact
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<210> 27

<211> 630

<212> DNA

<213> soybean

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<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 27

actgcatgca tgcaagcaaa tttaacttta cacaacacac caccagagtg taagctgttt
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cataaaaaat gattgtttcg ggctttcgga tcacaaggct tgtttagtat tcggtaagaa
120

agaaagaaat aggtgataaa taaagtggat agaaacataa aagaaaggaa taaagtaatg
180

aaaataaggg agaagtagaa taatggaaat agataagaaa tagaatggat tcgatagtat
240

atctagttta agagaaataa gaaaaaataa gaacaagaaa aaaaattgca ttttaattta
300

ttatttgtac tgtatcgatg attggcacga gattataagt ttttttttc gtgtttaccg
360

ttgaaggatt atatatcata ccatttggtt gtcaaccaac acggaacttt aagtctcttg
420

atgttcaaaa gcacttaaaa ctaaggaatt ttacatcata ttagtcgtct gtagactgat
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acaggatttt aagcctatat atctagcatt gatccggttg gcaatcaata tcacattaat
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gatcggtaaa ccattcatat aacccttttg attgggtcaag aaatggcttt atgaatccca
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ggattgagcc cagaancagg ngatactagn
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<210> 28
 <211> 756
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 28
 attggcttaa cttgagtttc aactccttct ctgggccttt accagctagc ctaactcact
 60

 cattttctct cacttttctt tctcttcaaa ataacaatct ttntggctcc cttntaact
 120

 gtgggggggg gaatancaag ggnggcttta ggctgcaaaa tttgatccta gatcataact
 180

 ttttcaactgg tgacgttcct gcttctttgg gtagcttaag agagctcaat gagatttccc
 240

 ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta
 300

 agacacttga catttctaata atgccttga atgggaactt gcctgctacc ctctctaatt
 360

 tatcctcact tacactgctg aatgcagaga acaacctcct tgacaatcaa atccctcaaa
 420

 gtttaggtag attgcgtact ctttctgtt ccgattttga gtagaaacca atttagtgga
 480

 catattcctt caagcatngc nnacatttcc tcgcttaggc agcttgattg tcaactgaata
 540

 atttcaggtg gagaaattnc agtctncttt gacagtcagc gcagtctaaa tcttcttcaa
 600

 tggtttctac aataggcctc tcagggtctg gcccccttt gnttggccaa ggaaanttaa
 660

 cttaaagctta tttggngggg aaanattcaa ctatgggggg acncggccct ttaaacccca
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 gggnttttcc caggttcctt ccaaggngc anttgt
 756

<210> 29
 <211> 566
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 29

gacccttggt ctatagaacc gaattcgagc tcggtaccgc gggatcctct agagtcgacc
60

tgcaggcatg caagcttatt attactacta ctacttatct tcaactccacc aactgtgtc
120

actaaaaccg gaaccatccc catacaaaat tctactgaag acaacatatt cccaatatt
180

cccaatgcat cagcgttctc catgaaagtt gtcatttctt ttccattcaa agatccatca
240

ttgtggcgcc ttcccaccat cacaagatca tagtttctt ccaaactatg cactgcttcc
300

aacacctcca ccccatcgtc caccgtaatc tcgtaccaac aaacggtacc aatgccatat
360

ttcatgctct tgaactcgtc aattaacccc tcgtccaaca tggatatctc ctcttctct
420

tcacgctctt ctcttgcaaa ataattttac aaccacacgg tttcttggtc acgataacaa
480

acctaataaa gctaccctcg tatctgcacg ctccgcattc gaattcccaa tgccagagct
540

tccctatcgg gggccccacc tatgaa
566

<210> 30

<211> 673

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 30

gggactggct gtgactgatc tctctggtct aatctcttcc agctgctgga gaacttgatg
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aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt
120

tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt
180

tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
240

caccccaggt gatttctcgc ttaggagttc taacaagata acaccaagac tgtagatata
300

agtttttagtg tttgctttct tgagcttttg agaagctcag gtgccccgga tcccaaagtc
360

ttccagctgt agcttatcac cgttggaat taagcagcaa gttggacatt caaccggag
420

naaaagaccc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc
480

aaccaccaat tggnttgga atggtggaag ggtttcccca atggttaattg gaagggtttc
540

ttccctnggg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagg
600

nttttggggg ccttattttt tncnaatncc ctttggnnng ggncccaaatt tcnaaantgg
660

aaattggntt tnn
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<210> 31

<211> 736

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 31

gttgnntagn tgcactatag aatncgaatt caatttaaac atttttaatt ttttgcctt
60

gtattctatt ttttcataaa ttctaattctt gctaataatt tcaattcata ttaagatcgg
120

taaatagaaa atctagaaaa aaaaacaaaa aaagtatttt tttttcattg attttatttt
180

caattgattt gtcactaaca aactgattcc tcttaaattc cacaaaagta catgtcgata
240

taaatatgag attataaatt catgatattc attttcgatt tttacatata atgttttttt
300

tatctttttt agttcctaatt aagcattttt aaatgtctta tgttcctact ttgcatatca
360

gggaccatt aatgggaaga ggtcactgcg agcatgaaca acgtgtcttt cgtctccga
420

acaacgtgcc atcttgcagg ctcaccacct cggaatccct ggagtgggtca ccaactgattt
480

tccggggaaa gcccgccggt gaaagtttga ttacaccggc aatgtgagcc ggtcgctgtg
540

gcaaccctgg tncggggaca aangcacacc aagttgnaan tttgggtccg agggnggcc
600

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naattggggt tgcanggata ctaagcnntt ggnnacttnc ctgggnaacc caccctaata
660

nccatntttc aatgggggnac cnaatttctt acaattggnt gcaananggg nttttngggg
720

aaccttttna ccccca
736

<210> 32
<211> 566
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 32
gaccnnagac gctactatag ggagacaagc tattcgaagg ggaactgaga acgatccaaa
60

gcactccaag aaacagagag tttcacattg tttgttgtgt acataatgaa gcaaacgtgc
120

gtggcatcac tgccttatta gaagagtgc acccagtgc agagagcccc atatgcgtct
180

acgcagtcca ccttatcgag ctctgtggga aaagtgcacc cattctcctt ccataaaaac
240

atagacacgg tcgcagaaaa ttcttgtctg tgaattaccc caacaccaac cacatcatgc
300

aagccttcga aaactactcc aacaactcaa gtggggccagt caaggttctt ccctacatca
360

acgtggcacc ttacaagagc atgcacgacg ccattttcaa cctcgcccaa gacaatatgg
420

tgcctttcat tatcatccct tttcacgaaa acggcaacat tgacctgtgc ggacacgtgg
480

ctgcctccat caggaagatg aatactaggt ttcaagcgca tgcgccatgc cgttggggat
540

actcgnggcc ggnactctng gtgggn
566

<210> 33
<211> 614
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 33

acaacaagca acgaacagct tttaacctta aactaggcaa atgccaatat taaacaacaa
60

ataattaaaa ttgtaaggct ggtcgagtat aaattaaaca aaaggccctc tattcaaacc
120

ttcatatatc atacctgntt ttaattaacg cggactactt ttcatataa aaaaaagatc
180

attagaggat taatttaaag cgnttttagtt tttaattacc aaagagtata attattatta
240

ggcgcttttg cccacaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaaggcaa
300

attggactaa tgcaaaagtg gcacaatctt tgncttgaac tctttaatta gcaacaaatn
360

atactcttct gcacaaatca caagaatacc ttacatgaaa agaatggnaa tntgacgggt
420

tacattaaat tatatgcagg tttctgcagg gaatcaattn tcaagaattt aaggggggggt
480

gggaattttc aatagctagc ttgactagca aagggaaga ataaaggnaa aangcttctt
540

ggctnngcct tttggganng gnaccccttt ngctaaaccg gaaanggnta tangaatggg
600

aaaggagana atcg
614

<210> 34

<211> 602

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 34

aggctagctg gtaaaggacc agagaaggat ttgaaactca agttaagcca ataaagctta
60

gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga
120

gactgaagca aagggcagaa acctaaagaa agaggtatgg aacctgtaag cctattgttg
180

aataactgaa cccctctaag gttgggaaga agtcccaaag ttgaagggat tgaaccacca
240

atttggttat catgaagact aagcttcttg aggccttgaa gttggccaat tttggcggtg
300

attcgacccc tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac
360

ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccgcaa
420

gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga
480

taggaggggtg cttcttccct ttcactggnc tacctcttcg ggaataagcc acctaagtag
540

aaagaaagan ctgggatagc taactctaca tagnctcaag gcnagagata attagggaaa
600

ng
602

<210> 35

<211> 644

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 35

ggaattttga agagaagtaa agtgagagaa aatgantgan nnaggctagc tggtaaagga
60

ccagagaagg atttgaaact caagttaagc caataaagct tagtggaatt agcaagacta
120

taagggattg ctctgtgag caagttgttg ctgaggtcaa gagactgaag caaagggcag
180

aaacctaaag aaagaggtat ggaacctgta agcctattgt tgaataactg aaccctctta
240

aggttgggaa gaagtcccaa agttgaaggg attgaaccac caatttggtt atcatgaaga
300

ctaagcttcc tgaggccttg aagttggcca attttggcgg tgattcgacc cctcaaacc
360

ttccaaggaa gctggatcac aataacctgt ccctgagcac acttgattcc aaccaacct
420

ccggaacaag ctccatagcc actggcattc cagctccgc aagaacctt ctggatcagc
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caactcttgc ttgaaagctt atcacatgta cctctctaca gataggaggg tgcttcttcc
540

ctttactgg nctacctctt cggaataag ccacctaag agaaagaaag anctgggata
600

gctaactcta catagnctca aggcnagaga taattagggga aang
644

<210> 36
<211> 748
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 36
attggcttaa cttgagtttc aactccttct ctggtccttt accagctagc ctaactcact
60

cattttctct cacttttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact
120

cttgggggtgg gaattccaag aatggcttct ttaggcttca aaatttgatc ctagatcata
180

actttttcac tggtgacgtt cctgcttctt tgggtagctt aagagagctc aatgagattt
240

cccttagtca taataagttt aatggagctg taccaaataa aataggaacc ctttctaggc
300

ttaagacact tgacatttct aataatgcct tgaatgggaa cttgcctgct accctctcta
360

atttatcttc acttacactg ctgaatgcag agaacaacct ccttgacaat caaatccctc
420

aaagtttagg tagattgcgt aatctttctg ttctgatttt gggtagaaac caatttagtg
480

gacatattcc ttcaagcatt gcaaacattt cctcgcttag gcagcttgat ttgcactgaa
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taatttcagt ggagaaattc cagtctcctt tgacagtcaa gcgcaagtct aaatctcttc
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aatgtttcct acaatagcct ctcanggtct gnccccctc tgcttgccaa gaaatttaac
660

tcaagctcat ttgtgggaaa tattcaacta tgtgggacag nccttcaacc ccatgttttn
720

ccaagcttca tacaaggagc atggccct
748

<210> 37
<211> 563
<212> DNA
<213> soybean
<220>

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<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 37
ctggctgtga ctgatctctc tggctctaac tcttccagct gctggagaac ttgatgaact
60

tctggctcgtg ctgatggaga aggatcaaca cagtgc aaag cgagcttcaa cgtgttttagc
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aactcgtcgc caactgtgga tgcattctctc atcaagtctg catcaaaaac ctcatttgc
180

cactcctctt tgacaactga ggcaaccac tgaggcaa at ctagtccatt catagacacc
240

ccaggtgatt tctcgttag gagttctaac aagataacac caagactgta gatatcagtt
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ttagtgtttg ctttcttgag ctttgagagc tcaggtgccc ggtatcccaa tgctccagct
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gtagctatca cgttggaatt agcagcagtt gacatcaacc cgagaaagac caaaatctgc
420

aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat
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gatgttctcc tgggaatgaa ggcagaacaa gccacggcca agcttggtcta tttcatcctt
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gtggccaatc aatgaatggt cat
563

<210> 38
<211> 623
<212> DNA
<213> soybean
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<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 38
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60

atatatacca tgtggagtat agtatcactt tttgtcctac aaccacattt tatgagactt
120

gcattttatg tgacatgaac ataaaaaata atgaaaaaga aaatgtcaca tatatatgat
180

acaatctttt taaaagtcaa tttgaataat ttttcatcag gaggaaaaag aagagagaaa
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atgaattaag tttcttctaa aaattaaaat caacttataa aaagaaaaaa cttaaatgaa
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aaaaattcaa aaagaaaaag aataaaatga tcaatagcct ttaggttttaa gcacaagggtg
360

aatccaaata aagaccccaa aagatagtagc agaaccacaac aatggtaaaa tctagaaata
420

tacatgtaaa gactgcattt atagaccatc atgactagca aatgcttaaa ggcacataga
480

tgaattaatc tatgcaacaa aatctgnccc aagttttttt tangcaagga aaatcatatc
540

attttattaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggctt
600

acatgaaatc tgtcaccaag tac
623

<210> 39

<211> 785

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 39

caattaggaa ataaatatat tgaaaagaat tggtagtcag ttcaatgaaa gtgaggctcct
60

caaacaactt gatgcagcan ctgtatgata caaaatatat taataactac accagcagaa
120

aaatataggt caatctatat ttgggaacca aataatattt aatttgtatc tgatagactc
180

aagaaattat aactaatttg gaagaaatgg atacctagta ttattaaaac accaaaacac
240

agggcagatt atagtagcta aagaggaaga agctaactag tcaaagtgtc acactattca
300

acactacaaa ggaccaatcc ccttttagag agcctgacct ttctcaccca agagctaccc
360

aagagaatac acacctctc ctccatatcc cctcccatat aacacaatcc tcaccaacta
420

agcacctacc tgacaattcc ctctaacca actctctgct catcagggtt gattctcttc
480

tctttccaag actttgggct tttgttttga ctaagccaaa tttctatctg ctggcctggt
540

ccaacagtat cttttacaga caagtttaca aaatattcgt atttgtaga atttattgat
600

attcctatta tgggtcccccac tgtgtgcaaa catttagaaa ctaatattac aattaacagt
660

ttttggtgaa tgcagcaaaa ctaaataatat ttgatataga aatcaacaaa ctgaaaaatt
720

atatngcaag gncaattgga aaagaaaatt gataccctt ttgnggnaat aaatatantg
780

nntac
785

<210> 40

<211> 640

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 40

tggaaggcgt ccttcaattc aatcacaaag tctaaatcaa agacgagggg gctgaaatca
60

tgggggacat tgacaacgta aggtaaccac taattaatta accactaata ttatcccatt
120

aatatcccat taagagataa tacatataga gccataaat aagcatctta acaagacaaa
180

taaattatcc attattcagc ttatgcccat ggtggtatta gaagtttagg aaaaaaaaaat
240

tcatcatttg gcaatttttg gctcattagc ttgaattggt tacaagggtg ggtatggact
300

tttttctttt cttttctcta aattcttcct tctatgatat acttttggtc aacttaaact
360

caatttctta tagctcaata ttttggattt agattggaaa tatctaaaag nactttaat
420

tttatattta caaaaaaaaaa aaaagcatcg ntcttttct ttttataaca aagggggatc
480

aaaatcactc tttttatgaa tccgcattat ccttnataat aattaacctc cactgggatt
540

taaaggnga ttaattaaat ccggaggcca tggaaggata tgggggaacc taatctaaaa
600

ntncatcctc aaccctaang ggaaaataaa ggaatngggg
640

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<210> 41
<211> 808
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 41
cttttgacac tatgaatacg aattcaaata ttaaataattt ttatTTTTtg tctttgtatt
60

ctatTTTTtc ataaattcta atnttgctaa taatttcaat tcatattaag atcggtaaatt
120

agaaaatcta gaaaaaaaaa caaaaaaagt atTTTTTTTT cattgatttt attttcaatt
180

gatttgtcac taacaaactg attcctctta aatctcacia aagtacatgt cgatataaat
240

atgagattat aaattcatga tatctatttt cgatTTTTtac atataatggt ttttttatct
300

tttttagttc ctaataagca tttttaaatg tcttatgttc ctactttgca tatcagggac
360

ccattaatgg gacgagggtc actgcgagca tgaacaacgt gtctttcggt ctcccgaaca
420

acgtgtccat cttgcaggct caccacctcg gaatccctgg agtgttcacc actgattttc
480

cggggaagcc gccggtgaag tttgattaca ccggcaatgt gagccgttcg ctgtggcaac
540

ctgttccccg gacaaaggca cacaagttga agtttgggtc cgaggggtgca gattgtgttg
600

caggatacta gcattgtcac tcctgagaac caccctatcc atcttcatgg gtgcattttc
660

acattgttgc agagggtttc gggaacttcg acccaaagaa agatccgcga aattcaacct
720

tggtggatcc cttttgaaaa acacagtggc tggcctgtaa atggatgggc aagtattcga
780

tttgggggct gataaccna gtaaatnt
808

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<210> 42
<211> 605
<212> DNA
<213> soybean
<220>
<221> misc_feature

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<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 42
 ctcccggtc ccaagtaata ggcccctcag agccaaaaca ttgggggggc taatttttcc
 60

tagaactg actttctgatt caaattctct atgaccttta gtgatctttt ccctcaatct
 120

ctttactgca acttgacttc catcctccaa aatagcctta taaacagntc catagggtgct
 180

ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattgggtcc
 240

atcaaaatgg actagtttcc ctccagcctc cccacctgct tcaacatcac caccagcaac
 300

tggagggact cctttttctg cctcatagtg gccgctctac cctcggtggc ttggccgntc
 360

ccggccttag atgntgatct ctttctgatc aggcagaaaa gcaggacaca acaaagnata
 420

atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagcttc
 480

ctatgatggg gatgggtnga cacttcanga gggggggcaa tgactccctg ggaggagct
 540

tgggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc caciaangag
 600

cnngn
 605

<210> 43

<211> 275

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 43

ctgaacggaa gtgactgcgt ttgtgtcgtg tgtaagcagg gaggggagc attataggct
 60

tcggttttgc tctttactcc tttggcacga tggtgagaat gcttattgtg gtgattcggc
 120

gatttgtatt cgagtatggc ggttgtagtg gtgtgtcga aggcagcgtt ttgggcggat
 180

tggtagcac gcgcgccat gtagtagcgg gaagggtggc ggtcnccggt gattaagacg
 240

tcggcggttt gcccggggcc cactatgagg acttt
275

<210> 44
<211> 632
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 44
tgtatataat taaaatgagt ttaatatatta tgtattaata gtataaaaatt tatcatatcat
60

gatgaatggg gaaattttga attatgatta aataattata taaaaaaaatt tacatgatga
120

atgaataact ttttttttct caattaaaat tatgatcctt tgtcgatatg ttttactgtg
180

tcgacctttt ttttcggggg agagggggacc agtaggagaa gtagtattta gtataaagaag
240

ggagagagaa gttgacttat cctttaatta gtttagagaa aattagacga gaaggaaaaa
300

aaataggcga aagtcacttt ttctttctat ctctaccaag aatggtgatg aaaaagtggg
360

gagcagaatt ttaaattttt attttcatat ttatccttct ccacattttt ggtttcttcc
420

atttttttat aaaatgattt atttttagggc ataggtaact tttcaatttt tttcattcta
480

ttcgatcaaa taaatagaaa aataatttac ttttctttct ttttaaccttt ttcataatttc
540

tctcataacg accacttatt aattacctct ttnccccac tttttgctat ncaaattctat
600

ctttgaattt cttccttttc attttgggtct cn
632

<210> 45
<211> 650
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 45
ttcacagaca tagcaaaaatt ctgaagtaag aagcaagttc acgtgtgatg gcgaaaccca
60

ttatagaata tgttagactg aaaggtaaca aattaaaata tgttttattg cagaaaccat
120

aaactaataa accttttggg tagatagaaa agtgataaat catacataat aataactgaa
180

atactcagct tttaatcaat ttaattcaat atatatctat ttttgaattt ttcaaagaga
240

tgcttagcta gggaggaaac ctaatttagt ataaaaaaaa gaaacaaatt aaaaacataa
300

attgccattg aatgcctctt aaaatattcc gatccattga tgtctacata ataatatata
360

ttattgatat aataaccgat tgaataaaaat ggatatacct attacgtaat agcagatttg
420

tctacgcaa agagacagtc aaaggtgcta attagaaatt aatcgcccca taataaaatt
480

ctaaaccttt gaaaagataa atcaattctc aaaaagattt attttactta tctcagtacc
540

atgcaccatg gatcatctta ctggtctggt tangaatttt caaagctacg ccacaaattg
600

aaattgggct aaaaatcaaa catgcatggt gtcacaacta tattactagt
650

<210> 46

<211> 628

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 46

gaatgcacat tttataaacg tgttgacat ctccccgnng ggggaccaat taataaggta
60

ccctgttgcc cctaggggac attggatggc catcagatgg tgcatatata caccaaagtt
120

tatacagcat tatagtgact ttcaacctcc tcaactccgag gtcccatat attctctcta
180

ttgaacttgt aaagactaat gaacttatga agactatcac tgaaaccac tatggaagcc
240

ccagtagtaa aatggncatg catgctcacc aaaagtttat acagcattat agcgacatac
300

gacctcactc ccaggncac atgctctatn gaacttctaa agctatctcn gaaccctatt
360

atagcttcat gagggttaaca tgcatttttag cgacttagaa aactacatat cattgagcgt
420

gactnttaag aaggcctcat tttgacacaa aagaacatga tggatttgcc tttatatctg
480

gttactaacc ttgatagcta ttttggnacag agagaaaaat attgacatgc ccgnggaatc
540

aaaaggtaga taatnattaa agagataaag aactatcccc ttgctagggg naaaaaaaaaa
600

ntatatccct atttaaataa aanccatc
628

<210> 47

<211> 736

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 47

tggtgtatat aattaaaatg agtttaatat ttatgtatta atagtataaa atttatcata
60

catgatgaat ggtgaaattt tgaattatga ttaaataatt atataaaaaa atttacatga
120

tgaatgaata actttttttt tctcaattaa aattatgac ctttgtcgat atgttttact
180

gtgtcgacct tttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag
240

aaggagaga gaagttgact tacccttta ttagttttaga gaaaattaga cgagaaggaa
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aaaaaatagg cgaaagtcac tttttctttc tatctctacc aagaatggtg atgaaaaagt
360

ggggagcaga attttaaaatt tttattttca tatttatcct tctccacatt tttgttttct
420

tccatttttt tataaaatga tttatttttag ggcatagtta actttttcaat ttttttcatt
480

tctattcgat caaataaata gaaaaataat ttacttttct ttcttttaac cttttcatat
540

ttcttcata acgaacaact tattaattta cctcttttcc cccacttttg tctatccaaa
600

ttctatcttt gaattttctt ccttttcatt ttggttctca acccaaataa agaagaacga
660

gtttggataa atcataaagg ttatataccc tataantgga agaacattta aatgggtccaa
720

ngggccttaa aattct
736

<210> 48
<211> 695
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 48
atgccagagc tttccttatac gtggcccccac ctatgaagaa tacacccacg ttgaaataca
60

tgttgttggt gttggacgag cccagcccga gagggtccgt ccacgagtat cccaacgtg
120

catggcgcat gcgcttgaaa cctagtattc atcttcctga tggaggcagc cacgtgtccg
180

acaaggtcaa tggtgccgtt ttcgtgaaaa gggatgataa tgaaaggcac catattgtct
240

tgggagaggt tgaaaatggc gtcgtgcatg ctcttgtaag gtgccacgtt gatgtagggg
300

agaaccttga ctggcccact tgagttgttg gagtagtttt cgaaggcctg catgatgttg
360

ttggtgttgg ggtaattcac agacaagaat tttctgagac cgtgtctatg ttttatggga
420

aggagaatgg gtgcactttt cccacgagct cgataaaggt ggactgcgta naccatatgg
480

gctctnttgc actggggttg actcttctaa taanggcagn gatgccncnc nccgtttgct
540

tnattatgta cncaacaaac aatgngaaac tctctgnttn ttgggagngc tttggatcgn
600

tctcanntnc ccttnnaata anctttntnn gngnactttn agggcgangc ttnnncnata
660

tgntaaccaa gggngntacn annnnnggnt ntaan
695

<210> 49
<211> 625
<212> DNA
<213> soybean
<220>

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<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 49
tttcccacaa tctttaatct tgctaataat ttcaattcat attaagatcg gaaaatagaa
60

aatctataaa aaaaaacaaa aaaagtatct ttttttcatt gattttatct tcaattgatt
120

tgtcactaac aaactgattc ctcttaaata tcacaaaagt acatgtcgat ataaatatga
180

gattataaat tcatgatata tattttcgat tttacatat aatgtttttt ttatcttttt
240

tagttcctaa taagcatttt taaatggctt atgttcctac ttgcatatac agggacccat
300

taatgggacg aggttcactg cgagcatgaa caacgtggct ttcgttctcc cgaacaacgt
360

gtccatcttg caggctcacc acctcggaat ccctggagtg ntcaccactg attttcggg
420

gaagccgccg gtgaagttna attacacccg gcaatgtgag ccgntcgctg gggcaacctg
480

ntcccgggac aaaggcacac aagttgaagt ttgggtcgag ggngcagatt gggngtgcan
540

gatactagca ttgcactcct gagaaccacc ctatccatct tcatggggac caattctaca
600

ttggtgcaga nggttcggg aacnc
625

<210> 50
<211> 621
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 50
actggtgtac gatttagtgt tactagctat cccatgtaat aaatatataa atcttgaatc
60

acaaggaatg atgcaatata tggttcctct aatagtaagt tatccacca aatctgaata
120

taattaagaa gttgtattcg tctgaatggt gtgtctaaaa gggttgattg atgaatgatg
180

gctacatgtg agagtttgat aacaacagct agctagccat tagccaagcc actaactaga
240

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$\langle 210 \rangle$	52
$\langle 211 \rangle$	480

<212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 52
 aagctccgcn cggggaacct nnagagtcta cctgaatccc caagntngaa cgaataacttg
 60

 ccaacacaaa tacgggcgat gggaaacatc tgaagaccgc tccaaagcgc cncataactaa
 120

 attggnnagga aaatttatat ctgacctttc atgggtgggg ggtgcatctg ctataaggaa
 180

 ggggttcattc tgggcaagat ctgtggaaaa caatattggg gatcaaattt tagggagtga
 240

 tgctacaacc tcttcattat acatggattc tgaaataagt ggtgtgaact ttaaagtga
 300

 cgaagacggc atgcaaatgc ctggtattca tctagttgat ttatttgaga ctgacaccaa
 360

 tacaagcggc gataaacatg attcccacta tgatgaagng ccacatctt atggggttga
 420

 ggggttacga cgatccaaac gtaggaacat acaacctgaa ccgntactct gattggggga
 480

 <210> 53
 <211> 736
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 53
 aatttattta gttgatataa ccactttcaa aaatctgact tacaagactc tttagaatc
 60

 ataatagtga cacttgatta agttagatta gactttataa aacacgagtt tgattttttt
 120

 tttaataata attaagggtc tagcttatat atattatata gttgatatag actactttca
 180

 aaagtctgac ttaaaaagtct ctttagtata cataataata taacctttta atttagtta
 240

 aaaatttgtc cctaaataaa ttaataaatc caaacttata tacaagttaa taggcttaag
 300

 tcttaaaaaa ataatatata tatatatata taaagcatta aaacatttca atgaaaacaa
 360

tataataata ataataataa atatattatt gttattaatt catagatttt attattacta
420

ttatagaata atttgtgtgt atatatataa atatatagag agagagaggg tcattttata
480

tgagtgagaa aatttaaata ttattatgaa ttttcaaaat taaaatcaca tgccatatga
540

ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg ttttaaaaac
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taatttaaatt aacttatata taactatatc agntaaaatt ngggtcataa aataagtata
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tcagntattt tacaaaaatt ataagnttc ataaataaat accaaatgat agtcccaggn
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gatgggncag cttngg
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<210> 54

<211> 642

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP).

<400> 54

ttaactttac acaacacacc accagagtgt aagctgtttc ataaaaaatg attgtttcgg
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gctttcggat cacaaggctt gtttagtatt cggttaagaaa gaaagaaata ggtgataaat
120

aaagtggata gaaacataaa agaaaggaat aaagtaatga aaataaggga gaagtagaat
180

aatggaaata gataagaaat agaatggatt cgatagtata tctagtttaa gagaaataag
240

aaaaaataag aacaagaaaa aaaattgcat ttaatttat tatttgtact gtatcgatga
300

ttggcacgag attataagtt ttttttttcg tgtttacgtt gaaggattat atatcatacc
360

atttgtttgt caaccaacac ggaactttta gtctcttgat gttcaaaagc acttaaaact
420

aaggaatttt acatcatatt agtcgctgta gactgatata ggattttaag cctatatatc
480

tagcattgat cgggtgtcaa tcaatatcac attaatgatc ggtaaaccat tcatataacc
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cctttgattg gtcaagaaat ggctttatga atncccagga ttgagcccag aagacagggtg
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atactagggt caattcatgg ttttaggata ggctcgtaaa cc
642

<210> 55
<211> 659
<212> DNA
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<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 55
aaaaggacct aaaagcaaaa agaaaattga gtatccttag gaattaaaaa tattccaata
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aaaataaaat aaagatccaa atgatagtgg gataaccgaa gaggaatgtc tttcaaccac
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tgctgaccg ccaccactgc caacagccta gtatcaaccg aatccacata taccaacaat
180

cttcagacaa acacttctaa gttggtgctg aagagacaat atctcatggg tagatcaaat
240

taagagtgct accaataaca aaatcgggat catttgacta acaaacagtt atgtgcattg
300

gatgttctac catagtacat tgctttatgt gaaattcttt taattattca atattgacat
360

gntcttatat atatatatat atatatatat atatatatat atatacgagg gattgnatta
420

tctctgaaaa aagattttat cataaaatca taatgatttc tcataatgna tctttacatt
480

ttaaaggtag ataaataaaa ttgatttaaa tnggnagata taattaaaat acataattaa
540

tatgactttt aaccaaattg atatataaac acttaaaaaa aagttcatga acgnccgggg
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ngnattggnt gggncaaaaa aaaattaata ctatcaacct aattaataat tatttatan
659

<210> 56
<211> 805
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 56

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ccaatgccag agcttccta tcgtgggccc cacctatgaa gaatacaccc acgttgaaat
60

acatgttggt gttgttgga ggcggcagcc gagagtgcg gtccacgagt atccccaacg
120

tgcattggcg atgcgcttga aacctagtat tcattcttct gatggaggca gccacgtgtc
180

cgacaaggtc aatgttgccg ttttcgtgaa aagggatgat aatgaaaggc accatattgt
240

cttgggagag gttgaaaatg gcgtcgtgca tgctcttgta aggtgccacg ttgatgtagg
300

gaagaacctt gactggccca cttgagttgt tggagtagtt ttcgaaggct tgcattgatg
360

ggttggtgtt ggggtaattc acagacaaga attttctgcg accgtgtcta tgttttatgg
420

gaaggagaat ggggtgcactt tccccacga gtcgataag gtggactgcg tagacgcata
480

tggggctctc ttgcactggg ttgcactctt ctaataaggc agtgatgccca cgcacgtttg
540

ctttcattat gtacacaaca aaacaatgtg aaaactctct gtttcttgga ggtgctttgg
600

atcgttctcn agttccoctt cgaataagct ttctgcgtgn tacttcnagg ggcnatgct
660

ttgtaccaat atgnnttanc caagggngnt tnccattncn ggtctttact accacnacat
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aacaccnat tnnttgaann gnanccnatc caactctac naaancgtna tcaatnacnt
780

tnnattngat ttganncaat ggccn
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<210> 57

<211> 632

<212> DNA

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<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 57

tttagaattc ataatagtga cacttgatta agttagatta gactttataa aacacgagtt
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tgattttttt ttttaataata attaagggtc tagcttatat atattatata gttgatatag
120

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actacttttca aaagtctgac ttaaaagtct ctttagtata cataataata taacctttta
180

atttagttaa aaaatttgtc cctaaataaa ttaataaatc caaacttata tacaagttaa
240

taggcttaag tcttaaaaaa ataatatata tatatatata taaagcatta aaacatttca
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atgaaaacaa tataataata ataataataa atatattatt gttattaatt catagatttt
360

attattacta ttatagaata atttgtgtgt atatataata atatatagag agagagaggg
420

tcattttata tgagtgagaa aatttaaata ttattatgaa ttttcaaaat taaaatcaca
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tgccatatga ttttcttaaa aaattacgta actttttttt ttacaaaagt aatcatatgg
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ttttaaaaaac taattttaat aacttatata taactatata agttaaattt gggtcataaa
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ataagtatat cagttatttt acaaaattat aa
632

<210> 58

<211> 437

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 58

cttttgacac tatngaatac gaattcgaat gtcggagcgt gcagatacga gggtagcgt
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gtttaggttt gttatcgtga acaagaaacc gtgtggttgt aaaattattt tgacaagaga
120

agagcgtgaa gaggaagagg aagataccat gttggacgag gggttaattg acgagttcaa
180

gagcatgaaa tatggcattg gtaacgtttg ttggtacgag attacggtgg acgatggggt
240

ggaggtgttg gaagcagtgc atagtttgga aggaaactat gatcttgtga tggtggaag
300

gcgcacaat gatggatctt tgaatggaaa agaaatgaca actttcatgg agaacgctga
360

tgcattggga atattgtggg atatgttccc ttcnccanc ntgnntggcn tngttccgct
420

tttttcgnet ntngcc
437

<210> 59
<211> 681
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 59
ggntttcttta gggcttcaaa atttgatcct agatcataac ttttttcact ggtgacgttc
60

ctgcttcttt gggtagctta agagagctca atgagatttc ccttagtcat aataagttaa
120

gtggagctat accaaatgaa ataggaaccc tttctaggct taagacactt gacatttcta
180

ataatgcctt gaatgggaac ttgcttgcta ccctctctaa tttatcctca cttacactgc
240

tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagtttaggt agattgcgta
300

atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaagcattg
360

caaacatttc ctgcttagg cagcttgatt tgcactgaat aatttcagtg gagaaattcc
420

agtctccttt gacagtcaag cgcagctaaa tctcttcaat ggttcctaca atagcctctc
480

agggctctgcc cccctctgct tggcaagaaa ttttaactcaa gctcatttgt gggaaatatt
540

caactatgtg gggtagagcc ttcaacccca tggctttcca agctncatca caagggggca
600

ttggccccct cctgagnngc aaacatcacc atcataggaa gctaacccca aagacataat
660

tctcatagta nccaggaggt n
681

<210> 60
<211> 644
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 60

acaacaagca acgaacagct tttaacctta aactaggcta atgccaatat taaagaagaa
60

ataattaaaa ttgtaaggct ggtcgtgtat aaattaaaca aaaggccctc tattcaaacc
120

ttcatatatac atacctgttt ttaattaacg cggactactt tttcatataa aaaaaagatc
180

attagaggat taatttaaag cgttttagtt ttttaattacc aaagagtata attattatta
240

ggcgctttgt cccacaatca atcacctaaa caagaaaaag aaaaagaaaa aaaaagtcaa
300

attggactaa tgcaaaagtg gcacaatctt tgtcttgaac tctttaatta gcaacaaatt
360

atactcttct gcacaaatca caagaatacc ttacatgaaa agaattggtaa tttgacgggt
420

tacattaaat tatatgcagt tttctgcagg taattaattt tcaagaattt aagggtgggt
480

ggtaattttc aatagctagc ttgactagca aaggaaagaa taaaggtaaa atgcttcttg
540

gtttggcctt ttggattggt atactttttg ctaaacggaa atgggttatat gaatggtaaa
600

ggagataaat tggtagatag ctaaaatggt atagncttaa tccn
644

<210> 61

<211> 678

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 61

aaattcattt aacttctcta attttttaa atcgatcaaatt tgggtttttca atctaaaata
60

taagaaacta tattttgtga tgggttttaa atcgacatta agtggttctta atctaccaca
120

aaaagcacat ttccaaaaaa ataaattaat tttaaaaatt ataagatcaa attgaatcaa
180

ttttaaaaa ataaatatta aattgaaaaa aaaaataaag gatcaaattg aacataaata
240

ataaatttga ggattaaaaa actaatttaa cctttaattt tttctcactt atattaatat
300

taaaaaatta tattgatttt cctaataact ccttatctca attaaaattt ccaaaaatta
360

attctagcat cttcaaacac tactcaccat gaaagttcat cacaaccatc tttctttctc
420

ttttctctac atcatgtttt cgcttcgcaa actttattgt gttcctagtc ttagacgtct
480

gataatcttc cacaagtatt gaactataac acttattgga cttgcaccgg taatagctaa
540

caccaaata gacgtgcact tgacttttat atcactaaga aaatttcaac acattgacca
600

agattagctc catcttgctt taacacttgg ttgactagtc acttaagtgc aacaaccact
660

ttgatatcat tgggtgga
678

<210> 62

<211> 571

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 62

tcttttaaga ccattcgaca ctatagaata cgaattccat aattaacaat aaagtcactc
60

tctattatat attttttctt cttaaattac atgatagtat ttcattatta tttgacaata
120

atgatatttt tatctcataa atattatttt gttttaaaaa tattcatagc acacacgagt
180

tttttatatc aacaaagagg tatcacttca gttggtcaat ttggtotaac ttttagacaa
240

tgctgtatag ttgaattgaa ttggaatttg gcagtatata ttttactttt tgccccctta
300

ttttcaatca aattagagta gacgcctcgt attattggca tacatggata ttggatcggc
360

acctgtgttt cagacctgag tcacatctga ctcggatcga ttttatotta catgaaaatt
420

ccaaaataat gaaagatatg gcaattggca ccatgtaact ctatggacac caatgcttca
480

ccgtagagct ctaaatttcg aggccttcta tatatagctt tgcgtgacta tgnnaaatta
540

ntcaatatcn tnttaatttt tttgnggccc c
571

<210> 63
<211> 856
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 63
aattagttgt cttgtttatt cattaccttt tcaatttttt taatcacccat aattaaggcc
60

tttcgaatcc ctttaagtga taaaagaaac gtgcaattat gcgaacaaat aaattttcgt
120

tatgttacta tttagtcaag gaggaaaaaa aagtgataag ggaagaaaca agggatattt
180

cctgttataa caaacttaaa atggcgacta ttttgacgac attgcaaata ctcatagtac
240

gatataaatt ttgaatttaa tatacaatga ataggcatat tcattttcta ccccaaaaaa
300

gcataactcat ttatgtacat ttaattttct ctccatagag gaattaatgt acaaccatgc
360

ataagggatg agcgaaaggg acagattatt gcaatccaga agcatccaag gaaagttgga
420

taaacaaatc aattaatata tataaaaaaa aaacaaaaat gctcctagta gaagattaaa
480

ggaagagttg gctatatatg gcaaaccttt tctaactggt ttaccctctt ctcatcacc
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gcattgcac accaatacgg gaacttttcc cattacaaaa ctcatggaa gccaacatat
600

ccccaaaaat tccactggat ctgcattgtc catgaaattt gacatttctt cttctacaaa
660

attcccatgc tatgtcgttt tccaccatcc taggtcatag tcctttctca ttccccgaat
720

cgnttcacac ttgtatgcaa tcttccaccc cagcctcatg ggaaacaccg ntaacactat
780

cactctaata tcattcttgg cataaaactca tctataaacc tctcgnccac gggctcttta
840

aattctcatc ttnttn
856

<210> 64
 <211> 639
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 64
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 cctagaacac tgactttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat
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 ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccatagggtg
 180

 ctctttccca tgatctcagc tgttgcacac aagagatcat cagctgtaaa agccattggt
 240

 ccatcaaaat ggactagttt cccctccagcc tccccacctg cttcaacatc accaccagca
 300

 actggaggga ctcccttttc tgcctcata gtggccgctc taccctcggt ggcttggccg
 360

 tcccggcctt agatgttgat ctctttctga tcaggcagaa aagcaggaca caacaaagta
 420

 taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtctttg ggcttagctt
 480

 ctatgatggt gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct
 540

 tgggaaagac atggggttga agggctggac ccacatagtt gaatatttcc acaaatgagc
 600

 ttgagttaaa attcttggca agcananggg ggacagaan
 639

<210> 65
 <211> 495
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
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 aaatacatgt tgttgntgnt ggacgcgccc agccgagagt gccggtccac tagtatcccc
 120

aacgtgcatg gcgcatgcgc ttgaaaccta gtattcatct tcctgatgga ggcagccacg
180

tgtccgacaa ggtcaatggt gccgttttcg tgaaaagga tgataatgaa aggcaccata
240

ttgtcttggg cgaggttgaa aatggcgtcg tgcattgctct tgtaagggtgc cacgttgatg
300

tagggaagaa ccttgactgg ccacttgag ttgttgagg agttttcgaa ggcttgcatg
360

atgtggttgg tgttggggta attcacagac aagaattttc tgcgaccggg tctatgtttt
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atgggaagga gaatgggtgc acttttccca cgagctcnat aagggggact gcntanacnc
480

atatggggct ctctt
495

<210> 66

<211> 480

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 66

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attaaattag acttaatttt taagagtatg gattaaaatg taaaatttgt ggggattata
120

aacataaata agtaattttt cctatatgag acatttattg aaatcttaag ataagatacg
180

tacatgcaaa ttaaattgat gcatgataat agaattaggt gaatagtcca atacctgaca
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cctcttttgt ccgaagtttt tggggcactt cttgatacct aaaccacag tgaagaagag
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gctctggtca atttcagtgg gtacttcaac ttttctaggg cttctgaagc ttttgctgaa
360

ggaagtgact gcgttttgtt ccgttgtaag caggagtggt aggcattata gggttggttt
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tggtctttac tcctttggca cgatgggtgag aatgcttatt gtggtgattc ggtgatttgt
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<210> 67

<211> 669

<212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
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 atattttaat aaaaataaaa taaagatcca aatgataatg tgataaccga agaggaatgt
 120

 ctttcaacca ctgctgacc gccaccactg ccaacagcct agtatcaacc gaatccacat
 180

 ataccaacaa tcttcagaca aacacttcta agttggtgct gaagagacaa tatctcatgg
 240

 gtagatcaaa ttaagagtgc taccaataac aaaatcggga tcatttgact aacaaacagt
 300

 tatgtgcatt ggatgttcta ccatagtaca ttgctttatg tgaaattctt ttaattattc
 360

 aatattgaca tgggtcttat atatatatat atatatatat atatatatat atatatacga
 420

 gggattgtat tatctctgaa aaaagatttt atcataaaat cataatgatt tctcataatg
 480

 gatcctntaca ttttaaaggt agataaataa aattgatttt aaatngggag atataattaa
 540

 aanacataat taatatgact tttacaaaat tgatatataa acacttaaaa aaaagntcca
 600

 tgacgcacng ggggnattgg tgggacaaaa aaaattatct atcactaatt aaaantatta
 660

 taaatatan
 669

 <210> 68
 <211> 486
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 68
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 catgatgaat ggtgaaattt tgaattatga ttaaataatt atataaaaaa atttacatga
 120

tgaatgaata actttttttt totcaattaa aattatgac ctttgtcgat atgttttact
180

gtgtcgacct tttttttcgg gggagagggg accagtagga gaagtagtat ttagtaaaag
240

aaggagaga gaagttgact taccctttaa ttagtttaga gaaaattaga cgagaaggaa
300

aaaaaatagg cgaaagtcac tttttctttc tatctctacc aagaatgttg atgaaaaagt
360

ggggagcaga attttaaatt tttattttca tttttatcct tctccacatt tttgntttct
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tccatttttt tataaaanga tttatttttag gcatagntaa cttttcaatt tttttcattt
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ctattc
486

<210> 69

<211> 779

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 69

tatttgtaaa ttgtttttta taattgaaaa gaaaataagg ttaaattatt ttcatataaa
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aaatttaatt tgttcttata agttattttg aaaattttat taaaataagt tgaaaacaat
120

ttataaataa atcataaact ataattttat aagttttctt aaatacttac acgtatgcc
180

taaaataagt tcagataaga tataaataaa ttcttccaaa cacatcttaa atctatattt
240

ttttaaaca aactttcatc gttaaaagga tattataata ataataataa acttcaatca
300

ttaacaatta atatatgtgg ataaaagagc attcaaaatg atattttatt agcacatgac
360

aatcacatt actctcaagc tattttttta aactaataaa aacttacata ttatatgata
420

tgatatatac tctctctata ttacacttt tttagagataa acaaggataa aaaatgatgt
480

aatatgacc gcatataata ttatttataa tgtacggaat gccgtttttg acattttata
540

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taatatatct gggggcaatt attttcttaa ccaataatta gcaaattttt atcttgcttt
600

ttctccatgg gggctaaatt aaactaaagg gncgtaccca atccagtccc actttttttt
660

aaataattnn tttcctcccc acttagnaaa ggagtntttn ggcttaaatn ggcagnncca
720

ttaaccataa gcctttnttg taaggagtct taccaantaa aatggggaag gcccccccc
779

<210> 70

<211> 677

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 70

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ctcattttct ctcacttttc tttctcttca aaataacaat ctttctggct cccttcctaa
120

ctcttggggg ggggaattcca agaatggctt ctttaggctt caaaatttga tcttagatca
180

taactttttc actggtgacg ttcttgcttc tttgggtagc ttaagagagc tcaatgagat
240

ttcccttagt cataataagt ttagtggagc tataccaaat gaaataggaa ccctttctag
300

gcttaagaca cttgacattt ctaataatgc cttgaatggg aacttgcttg ctaccctctc
360

taatttatcc tcacttacac tgctgaatgc agagaacaac ctcttgaca atcaaatccc
420

tcaaagttta ggtagattgc gtaatctttc tgttctgatt ttgagtagaa accaatttag
480

tggacatatt ccttcaagca ttgcaaakat ttctctgctt aggcagcttg atttgcactg
540

aataatttca gtggagaaat tccagctcct ttgcagtcag cgcagctaaa tctcttcaat
600

ggttcctaca atagcctctc anggtctgtc cccctctgc ttgccaagaa atttaactca
660

agctcatttg tgggaat
677

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<210> 71
<211> 571
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 71
tgggactggc tgtgactgat ctctctgggc taatctcttc cagctgctgg agaacttgat
60

gaacttctgg tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt
120

ttagcaactc gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat
180

ttgtccactc ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag
240

acaccccagg tgatttcctc gttaggagtt ctaacaagat aacaccaaga ctgtagatat
300

cagttttagt gtttgctttc ttgagctttg agagctcagg tgcccgggtat cccaatgctt
360

cagctgtagc tatcacgttg gaattagcag cagttgacat caaccgagaa agacccaaaat
420

ctgcaatttt agcatttgna ttctcattaa acaacacaat gntggatgng anggtnccat
480

ggatgaaggc cttctnggna agnaagnaaa acaaagcacc gggccaaggc ttgggctaata
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ttcaaccttg gggggcaaac naanaaatgt t
571

<210> 72
<211> 756
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 72
attggcttaa cttgagtttc aactccttct ctggctcctt accagctagc ctaactcact
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cattttctct cacttttctt tctcttcaaa ataacaatct ttntggctcc cttntctaact
120

gtgggggggg gaatancaag gngggcttta ggctgcaaaa ttgataccta gatcataact
180

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ttttcactgg tgacgttccct gcttccttgg gtagcttaag agagctcaat gagatttccc
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ttagtcataa taagtttagt ggagctatac caaatgaaat aggaaccctt tctaggctta
300

agacacttga catttctaataat aatgccttga atgggaactt gcctgctacc ctctctaatt
360

tatcctcact tacactgctg aatgcagaga acaacctcct tgacaatcaa atccctcaaa
420

gtttaggtag attgcgtact ctttcctggt ccgattttga gtagaaacca atttagtgga
480

catattcctt caagcatngc nnacatttcc tcgcttaggc agcttgattg tcaactgaata
540

atttcaggtg gagaaattnc agtctncttt gacagtcagc gcagtctaaa tcttcttcaa
600

tggttnctac aataggcctc tcagggctctg gcccccttt gnttggccaa ggaaanttaa
660

cttaagctta tttggngggg aaanattcaa ctatgggggg acncggccct ttaaacccca
720

gggnntttcc caggttcctt ccaagggngc anttgt
756

<210> 73

<211> 557

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 73

tgtgactgat ctctctgggc taatctcttc cagctgctgg agaacttgat gaacttctgg
60

tcgtgctgat ggagaaggat caacacagtg caaagcgagc ttcaacgtgt ttagcaactc
120

gtcgccaact gtggatgcat ctctcatcaa gtctgcatca aaaacctcat ttgtccactc
180

ctctttgaca actgaggcaa cccactgagg caaatctagt ccattcatag acnccccagg
240

tgatttcntc gttaggagtt ntaacaagat aacaccaaga ctgtagatat cagttttagt
300

gtttgctttc ttgagctttg agagttaagg gncccggant cccannngtc nagttgnagt
360

tatancgttg gaattagcag nagttgcntc aaccgaaaaa gaccaaaatc tgaatttttag
420

catttgtttt tcatcaagca acacattgnt ggatgngagg tcccatgtat gatgtttctc
480

tgggaatgaa ggcaaacaag cccgggcca aagcttgggct attttaatcc ttggtggcca
540

aacaatgaaa ggtnat
557

<210> 74

<211> 673

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 74

gggactggct gtgactgac tctctggct aatctcttc agctgctgga gaacttgatg
60

aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt
120

tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt
180

tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
240

caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgtagatatc
300

agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaagtc
360

ttccagctgt agcttatcac cgttgggaat taagcagcaa gttggacatt caaccggag
420

naaaagacc aaaaattttg caaattttta agcaatttng gnanttcttn aatcaaggcc
480

aaccaccaat tggnttggga atggtggaag ggtttcccca atggttaattg gaagggtttc
540

ttccctnngg gaaaatggaa aggggcaana aaacaaaggc ccaacngggg ccccaaagg
600

nttttggggg ccttatTTTT tncnaatncc ctttggnngg ggncccaa atcnaaantgg
660

aaattgntt tnn
673

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<210> 75
 <211> 602
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 75
 aggctagctg gtaaaggacc agagaaggat ttgaaactca agttaagcca ataaagctta
 60

 gtggaattag caagactata agggattgct cctgtgagca agttgttgct gaggtcaaga
 120

 gactgaagca aagggcagaa acctaaagaa agaggtatgg aacctgtaag cctattgttg
 180

 aataactgaa cccctctaag gttgggaaga agtcccaaag ttgaagggat tgaaccacca
 240

 atttggttat catgaagact aagcttcctg aggccttgaa gttggccaat tttggcgggtg
 300

 attcgacccc tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac
 360

 ttgattccaa cccaacctcc ggaacaagct ccatagccac tggcattcca gctcccgcga
 420

 gaacccttct ggatcagcca actcttgctt gaaagcttat cacatgtacc tctctacaga
 480

 taggaggggtg cttcttccct ttcaactggnc tacctcttcg ggaataagcc acctaagag
 540

 aaagaaagan ctgggatagc taactctaca tagnctcaag gcnaagagata attagggaaa
 600

 ng
 602

<210> 76
 <211> 748
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 76
 attggcttaa cttgagtttc aactccttct ctggctcttt accagctagc ctaactcact
 60

 cattttctct cacttttctt tctcttcaaa ataacaatct ttctggctcc cttcctaact
 120

cttggggtgg gaattccaag aatggcttct ttaggcttca aaatttgatc ctagatcata
180

actttttcac tggtgacgtt cctgcttctt tgggtagctt aagagagctc aatgagattt
240

cccttagtca taataagttt aatggagctg taccaaataa aataggaacc ctttctaggc
300

ttaagacact tgacatttct aataatgcct tgaatgggaa cttgcctgct accctctcta
360

atttatcttc acttacactg ctgaatgcag agaacaacct ccttgacaat caaatccctc
420

aaagtttagg tagattgcgt aatctttctg ttctgatttt gggtagaaac caatttagtg
480

gacatatccc ttcaagcatt gcaaacaatt cctcgcttag gcagcttgat ttgcactgaa
540

taatttcagt ggagaaattc cagtctcctt tgacagtcaa gcgcaagtct aaatctcttc
600

aatgtttcct acaatagcct ctcanggtct gncctccctc tgcttgccaa gaaatttaac
660

tcaagctcat ttgtgggaaa tattcaacta tgtgggacag nccttcaacc ccatgttttn
720

ccaagcttca tacaaggagc atggccct
748

<210> 77

<211> 563

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 77

ctggctgtga ctgatctctc tgggtctaatac tcttccagct gctggagAAC ttgatgaact
60

tctggctcgtg ctgatggaga aggatcaaca cagtgcaaag cgagcttcaa cgtgttttagc
120

aactcgtcgc caactgtgga tgcattctctc atcaagtctg catcaaaaaac ctcatttgctc
180

cactcctctt tgacaactga ggcaaccac tgaggcaaata ctagtccatt catagacacc
240

ccaggtgatt tctcgttag gagttctaac aagataaac caagactgta gatatacgtt
300

ttagtgtttg ctttcttgag ctttgagagc tcaggtgccc ggtatcccaa tgetccagct
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gtagctatca cgttggaatt agcagcagtt gacatcaacc cgagaaagac caaaatctgc
420

aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat
480

gatgttctcc tgggaatgaa ggcagaacaa gccacggcca agcttggcta tttcatcctt
540

gtggccaatc aatgaatggt cat
563

<210> 78

<211> 623

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 78

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60

atatatacca tgtggagtat agtatcactt tttgtcctac aaccacattt tatgagactt
120

gcatttttatg tgacatgaac ataaaaaata atgaaaaaga aaatgtcaca tatatatgat
180

acaatctttt taaaagtcaa tttgaataat ttttcatcag gaggaaaaag aagagagaaa
240

atgaattaag tttcttctaa aaattaaaat caacttataa aaagaaaaaa ctttaatgaa
300

aaaaattcaa aaagaaaaag aataaaatga tcaatagcct ttaggttttaa gcacaagggtg
360

aatccaaata aagaccccaa aagatagtagc agaaccacaac aatggtaaaa tctagaaata
420

tacatgtaaa gactgcattt atagaccatc atgactagca aatgcttaaa ggcacataga
480

tgaattaatc tatgcaacaa aatctgnccc aagttttttt tangcaagga aaatcatatc
540

attttattaa ggataactga gaggaccaat ggtgtaatca attgaaatca tgcgaggctt
600

acatgaaatc tgtcaccaag tac
623

<210> 79
 <211> 605
 <212> DNA
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 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 79
 ctcccgggtc ccaagtaata ggccccctcag agccaaaaca ttggggggggc taatttttcc
 60

tagaacactg acttctgatt caaattctct atgaccttta gtgatctttt ccttcaatct
 120

ctttactgca acttgacttc catctccaa aatagcctta taaacagntc cataggtgct
 180

ctttcccatg atctcagctg gtgcacacaa gagatcatca gctgtaaaag ccattgggtcc
 240

atcaaaatgg actagtttcc ctccagcctc cccacctgct tcaacatcac caccagcaac
 300

tggagggact cttttttctg cctcatagtg gccgctctac cctcggtggc ttggccgntc
 360

ccggccttag atgntgatct ctttctgatc aggcagaaaa gcaggacaca acaaagnata
 420

atcaggacta cgaggagaac tcctgctact atgagaatta tgnctttggg gcttagcttc
 480

ctatgatggg gatgggtnga cacttcanga gggggggcaa tgactccctg gganggagct
 540

tgggaaagac atgggggtga aggnctgnac ccacataggn gaaaaattcc cacaaangag
 600

cnngn
 605

<210> 80
 <211> 711
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 80
 ttaangncca acgactcact atagggcgaa ttgggcccga cgtcgcatgc tcccggccgc
 60

catggccgcg ggattggctt aacttgagtt tcaactcctt ctctggctct ttaccagcta
 120

gcctaactca ctcattttct ctcacttttc tttctcttcn taaaataaca atctttctgg
180

ctcccttct aactcttggg gtgggaattc caagaatggc ttcttttaggc ttcaaaattt
240

gacctagat cataactttt tcaactggta cgttcctgct tctttgggta gcttaagaga
300

gctcaatgag atttccctta gtcataataa gtttagtgga gctataccaa atgaaatagg
360

aaccctttct aggettaaga cacttgacat ttctaataat gccttgaatg ggaacttgcc
420

tgctaccctc tctaatttat cctcacttac actgctgaat gcagagaaca acctccttga
480

caatcaaadc cctcaaagtt taggtagatt gcgtaatctt tctgttctga ttttgagtag
540

aaaccaattt agtgacata ttccctcaag cattgcaaac atttcctcgc ttaggcagct
600

tgatttgtca ctgaataatt tcagtggaga aattccagtc tcctttgaca gtcagcgcag
660

tctaaatctc ttcaatgttt cctacaatag cctctcaggg tctgtcccc n
711

<210> 81

<211> 716

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

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120

tcactatagg gctcgagcgg ccgcccgggc aggtgggact ggctgtgact gatctctctg
180

gtctaattctc ttccagctgc tggagaactt gatgaacttc tggctgtgct gatggagaag
240

gatcaacaca gtgcaaagcg agcttcaacg tgtttagcaa ctgctcgcca actgtggatg
300

catctctcat caagtctgca tcaaaaacct catttgtcca ctctctttg acaactgagg
360

caacccactg aggcaaactct agtccattca tagacacccc aggtgatttc ctcgtttagga
420

gttctaacaa gataacacca agactgtaga tatcagtttt agtgtttgct ttcttgagct
480

ttgagagctc aggtgcccgg tatcccaatg ctccagctgt agctatcacg ttggaattag
540

cagcagttga catcaaccga gaaagaccaa aatctgcaat tttagcattt gtattotcat
600

caagcaacac attgctggat gtgagggtcc catgtatgat gttctcctgg gaatgaaggc
660

agaacaagcc acggggccaag tcttgggcta ttttcacct tgggtgggcca atcaan
716

<210> 82

<211> 713

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 82

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ccatggccgc gggattatac gactcactat agggctcgag cggccactat gaggacagaa
120

aaaggagtcc ctccagttgc tgggtggtgat gttgaagcag gtggggaggc tggagggaaa
180

ctagtccatt ttgatggacc aatggctttt acagctgatg atctcttggtg tgcaacagct
240

gagatcatgg gaaagagcac ctatggaact gtttataagg ctattttgga ggatggaagt
300

caagttgcag taaagagatt gagggaaaag atcactaaag gtcatagaga atttgaatca
360

gaagtcagtg ttctaggaaa aattagacac cccaatgttt tggctctgag ggctattac
420

ttgggaccca aaggggaaaa gcttctgggt tttgattaca tgtctaaagg aagtcttgct
480

tctttcctac atggtaagtt tcgtgtgctg ttctttcatt aagtgttggtg tgtgctgttc
540

tttaattata atttgaggtt ttaccttagt aatctgtata attctaactg gagaacagta
600

caaacaaaaa cacctaagga acaacacctt anctttaata taccatatca ataagtgaat
660

tattttctta ttcattctga tgcagggtgt ggaactgaaa catttatttg atn
713

<210> 83

<211> 712

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 83

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gccatggccc gcgggattgg cttaacttga gtttcaactc cttctctggt cctttaccag
120

ctagcctaac tcaactcattt tctctcactt ttctttctct ttaaaataac aatctttctg
180

gctcccttcc taactcttgg ggtgggaatt ccaagaatgg cttctttagg cttcaaaatt
240

tgatcctaga tcataacttt ttcactgggtg acgttcctgc ttctttgggt agcttaagag
300

agctcaatga gatttccctt agtcataata agtttagtgg agctatacca aatgaaatag
360

gaaccctttc taggcttaag acacttgaca tttctaataa tgccttgaat ggggaacttg
420

ctgctaccct ctctaattta tctcactta cactgctgaa tgcagagAAC aacctccttg
480

acaatcaaat ccctcaaagt ttaggttagat tgcgtaatct ttctgttctg attttgagta
540

gaaaccaatt tagtggacat attccttcaa gcattgcaaa catttccctg cttaggcagc
600

ttgatttgca ctgaataatt tcagtggaga aattccagtc tcctttgcag tcagcgcagt
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ctaaatctct tcaatggtn ctacaatagn ctctcagggt ctgncccccc tn
712

<210> 84

<211> 681

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 84

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ctgcttcttt gggtagctta agagagctca atgagatttc ccttagtcat aataagttta
120

gtggagctat accaaatgaa ataggaaccc tttctaggct taagacactt gacatttcta
180

ataatgcctt gaatgggaac ttgcctgcta cctctcttaa tttatcctca cttacactgc
240

tgaatgcaga gaacaacctc cttgacaatc aaatccctca aagtttaggt agattgcgta
300

atctttctgt tctgattttg agtagaaacc aatttagtgg acatattcct tcaagcattg
360

caaacatttc ctgcttagg cagcttgatt tgcactgaat aatttcagtg gagaaattcc
420

agtctccttt gacagtcaag cgcagctaaa tctcttcaat ggttcctaca atagcctctc
480

agggctctgcc cccctctgct tggcaagaaa ttttaactcaa gctcatttgt gggaaatatt
540

caactatgtg gggtagagcc ttcaacccca tggctttcca agctncatca caagggggca
600

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tctcatagta nccaggaggt n
681

<210> 85

<211> 639

<212> DNA

<213> soybean

<220>

<221> misc_feature

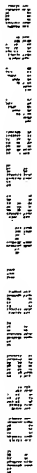
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 85

tcccccttgg gtcccaagta ataggccctc agagccaaaa cattgggggtg tctaattttt
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cctagaacac tgacttctga ttcaaattct ctatgacctt tagtgatctt ttccctcaat
120

ctctttactg caacttgact tccatcctcc aaaatagcct tataaacagt tccatagggtg
180



ctctttccca tgatctcagc tgttgcacac aagagatcat cagctgtaaa agccattggt
240

ccatcaaaaat ggactagttt cctccagcc tccccacctg cttcaacatc accaccagca
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actggagggga ctcctttttc tgtcctcata gtggccgctc taccctcggt ggcttggccg
360

tcccggcctt agatgttgat ctctttctga tcaggcagaa aagcaggaca caacaaagta
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taatcaggac tacgaggaga actcctgcta ctatgagaat tatgtctttg ggcttagctt
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ctatgatggt gatggtttga cacttcagga ggtggggcaa tgactccttg tgatggagct
540

tgggaaagac atgggggttga agggctggac ccacatagtt gaatatttcc acaaagtagc
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639

<210> 86

<211> 661

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 86

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60

ggtaaaggac cagagaagga gttgaaactc aagttaagcc aataaagctt agtgaatta
120

gcaagactat aagggattgc tcctgtgagc aagttgttgc tgaggtcaag agactgaagc
180

aaagggcaga aacctaaaga aagaggtatg gaacctgtaa gcctattgtt gaataactga
240

accctctaa ggttgggaag aagtcccaa gttgaaggga ttgaaccacc aatttggtta
300

tcatgaagac taagcttctg aggccttgaa gttggccaat tttgtcgggtg attcgacccc
360

tcaaaccctt ccaaggaagc tggatcacia taacctgtcc ctgagcacac ttgattccaa
420

cccacctccg gaacaagctc catagccact gtcattccag cttccgcaag aaccttctg
480

gatcagccaa ctcttgcttg aaaagcttat cacatgtacc ttttacagat aggaggntgc
540

ttcttccttt cactgggtcta cctcttcgga ataagccaac ctaatgagaa agaaagatct
600

gngatagctn acttacatac tnagncagag ataattantg naagcnnaag ttaaactntt
660

t
661

<210> 87

<211> 626

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 87

aattcgtggg ctacaaagga tgaacgtaaa ctatatgcac ctccagctgg ttcaggcttc
60

atatctgggt ttacttctat ctacgcaga tcttctgttg atagtactca aaatctgtct
120

attccttttg gtccaagctc atacctttct gcacaggctc gagtagttga tgagtattct
180

atgtcccaga ttatcttaca aaatgtgctt gatggagggg tcaactggat gttaatagtt
240

gtcactgggt caagccatgt tacatatgga tctagaggaa ctggagtgcc agcaagaatt
300

tcaggaaaaa taaaaaagaa aaaccatgca gttatattac ttgaccctga aagacaattc
360

attcgcagag aaggagaagt tcctgttgct gattttttgt ggtattctgc tgcgagaccc
420

tgtagtagaa attgctttga ccgtgctgag attgctcggg ttatgaatgc tgctgggcgg
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aggcgagatg ccctcccaca ggtaaaccac caattacagt tactaatttg tttgactgtt
540

aatcttcttg ccccatagac cctncttcca atttttagcc ctttatgtcc totcattcct
600

agnnggataa gggtttgggg gnggtg
626

<210> 88

<211> 627

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<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 88
tgaaaaactg aaggaccaaa ttaaatctaa aaaataaata aattaaaaga ctaaaaaata
60

aatctatcca aaattaaaag gtttattctt ggaagtaatg aaatgtatct tgactctttg
120

aagaatgcat tactataatg aaagagtagg tggagagagg ggataataaa atcccactaa
180

ataacatcca tgactatcac tataaaaaaa aatattatta ttaagataag aagaattatc
240

taacttgaat aagagactac taccaaagtg agaaaaaggc cttataacat agagtttttc
300

aagtttacct ataaaacttg taataagatt tgttttccaa ccatctaatt ttttattagt
360

gtggactgca taaaaaaaaat atagtaacaa gaaactacta aattagactt tttgaactat
420

tcattgtatg gctgccatga aacctacctg cctggagggg tgggtccac gtaagactgt
480

aagagggagg agggaagcac tagtcacaca ccggcgacg ttagcgaggc aatgttccta
540

gattgaaacg gagaagggtga ttagaggggc ggaaatctca aagcagacac aggcaactaa
600

tttatcgctt ctttctcat tctgctta
627

<210> 89
<211> 782
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 89
cacataatta acaataaagt catcttctat tatatatttt ttcttcttaa attacatgat
60

agtatttcat cattatttga caataatgat atttttatct cataaatatt attttgttt
120

aaaaatattc atagcacaca cgagtttttt atatcaacaa agaggtatca cttcagttgg
180

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tcaatttggg ctaactttta gacaatgtcg tatagttgaa ttgaattgga atttggcagt
240

atatatttta ctttttgccc ccttattttc aatcaaatta gagtagacgc ctcgatttat
300

tggcatacat ggatattgga tcggcacctg tgtttcagac ctgagtcaca tctgactcgg
360

atcgatttta tcttacatga aaattccaaa ataatgaaag atatggtaat tggcaccatg
420

taactctatg gacaccaatg cttcacgtag agctctaaat ttgaggcctt ctatatatag
480

tttgcgtgac tatgtaaatt atcaatatca ttttaattttt ttgcgaccac gaaatatacg
540

aatttattat tgaacacaaa aagtagagtg tatattttta gtctaggatt ttatgagagg
600

caaaaataag aataacctct tgatatattt tcttggatac actttcttta ttatatattt
660

tttaataatg gattataatt tattggaaac aatcaaatta tangggaaaa ttcattggaa
720

taaaagaang aaatttaaaa aaaaatataa tttttaataa atttaagtaa taaaaatcct
780

tt
782

<210> 90

<211> 160

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 90

tggttgagat gtgtataaga gacagttgcc ccacctcctg aagtgtcaaa acatcaccat
60

cataggaagc taagcaccaa agacataatt ctcatagtag caggagttct cctcgtagtc
120

ctgattatac tttgttgtgt cctgcttttc tgctgatca
160

<210> 91

<211> 779

<212> DNA

<213> soybean

<220>

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<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 91
tgctcccggc gcatggccgn gggattggct taacttgagt ttcaactcct tctctgggtcc
60

tttaccagct agcctaactc actcattttc tctcactttt ctttctcttc aaaataacaa
120

tctttntggc tcccttncta actgtggggg ggggaatanc aaggngggct ttaggctgca
180

aaatttgatc ctagatcata actttttcac tggtgacgtt cctgcttctt tgggtagctt
240

aagagagctc aatgagattt cccttagtca taataagttt agtggagcta taccaaataga
300

aataggaacc ctttctaggc ttaagacact tgacatttct aataatgcct tgaatgggaa
360

cttgccctgct accctctcta atttatcctc acttacactg ctgaatgcag agaacaacct
420

ccttgacaat caaatccctc aaagttagg tagattgctt actctttcct gttccgattt
480

tgagtagaaa ccaatttagt ggacatattc cttcaagcat ngcnacatt tctctgctta
540

ggcagcttga ttgtcactga ataatttcag gtggagaaat tncagtcctc tttgacagtc
600

agcgcagtct aaatcttctt caatggttnc tacaataggc ctctcagggt ctggcccccc
660

tttgnttggc caaggaaant taacttaagc ttatttggng gggaaanatt caactatggg
720

gggacncggc cttttaaacc ccagggnntt tcccagggtc cttccaaggg ngcanttgt
779

<210> 92
<211> 743
<212> DNA
<213> soybean
<220>
<221> misc_feature
<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
<400> 92
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60

atcttctctc acttttcttt ctcttcaaaa taacaatctt tctggctccc ttcttaactc
120

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ttgggggtggg aattccaaga atggcttctt taggcttcaa aatttgatcc tagatcataa
180

ctttttcact ggtgacgttc ctgcttcttt gggtagctta agagagctca atgagatttc
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ccttagtcat aataagttta gtggagctat accaaatgaa ataggaaccc tttctaggct
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taagacactt gacatttcta ataatgcctt gaatgggaac ttgootgcta ccctctctaa
360

tttatcctca cttacactgc tgaatgcaga gaacaacctc cttgacaatc aaatccctca
420

aagtttaggt agattgcgta atctttctgt tctgattttg agtagaaacc aatttagtgg
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540

taatttcagt ggagaaattc cagtctcctt tgacagtcag cgcagtctaa atctcttcaa
600

tgtttcctac aatagcctct cangttctgn cccccctctg cttgccaaga aattaactca
660

agctcatttg tgggaaatat tcaactatgt gggacaggcc ttcaacccca ngcttttcca
720

agcttcatca caaggggcat tgg
743

<210> 93

<211> 742

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 93

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60

ctctcatttt tctttctctt caaaataaca atctttctgg ctcccttctt aactcttggg
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gtgggaattc caagaatggc ttcttttaggc ttcaaaattt gatcctagat cataactttt
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cctcacttac actgctgaat gcagagaaca acctccttga caatcaaato cctcaaagtt
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taggtagatt gcgtaatctt tctgtttctga ttttgggtag aaaccaattt agtggacata
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ttccttcaag cattgcaaac atttctctgc ttaggcagct tgatttgacac tgaataattt
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cagtggagaa attccagtct cctttgacag tcaagcgcaa gtctaaatct cttcaatggt
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tcatttggtg gaaatattca actatgtggg acagncttc aaccccatgt ttnccaagc
720

ttcatacaag gagcatggcc ct
742

<210> 94

<211> 741

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 94

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tctctcactt ttctttctct tcaaaataac aatctttctg gctcccttcc taactcttgg
120

ggtgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt
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ttcactgggtg acgttctgc ttctttgggt agcttaagag agctcaatga gatttccctt
240

agtcataata agtttagtgg agctatacca aatgaaatag gaacccttcc taggcttaag
300

acacttgaca tttctaataa tgccttgaat gggaacttgc ctgctaccct ctctaattta
360

tctcactta cactgctgaa tgcagagaac aacctccttg acaatcaaatt cctcaaagt
420

ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat
480

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600

tcctacaata gcctctcang ttctgcccc ctctgcttgc caagaaatct aactcaagct
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catttggtggg aaatattcaa ctatgtggga caggccttca accccatggt tttccaagct
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741

<210> 95

<211> 743

<212> DNA

<213> soybean

<220>

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<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 95

cttaacttga gtttcaactc cttctctggt cctttaccag ctagcctaac tcaactcattt
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ggtgggaatt ccaagaatgg cttcttttagg cttcaaaatt tgatcctaga tcataacttt
180

ttcactgggtg acgttctctgc ttctttgggt agcttaagag agctcaatga gatttcctt
240

agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag
300

acacttgaca tttctaataa tgccttgaat gggaacttgc ctgctaccct ctctaattta
360

tcctcactta cactgctgaa tgcagagAAC aacctccttg acaatcaaat ccctcaaagt
420

ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat
480

attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgca ctgaataatt
540

tcaaggggag aaattncagt ctcttttgac agtcaagcg c aagtctaaat ctcttcaatg
600

gttcctacaa taagcctctc anggtctgnc cccctctgc ttgncaagaa aattaactca
660

agctcatttg ggggaaatat tcaactatgn gggacagncc ttcaacccat gttttccaag
720

ctccatacan gagcatggcc cnt
743

<210> 96

<211> 742

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 96

cttaacttga gtttcaactc cttctctggt cctttaccag cttagcctaac tcaactcattt
60

tctctcactt ttctttctct tcaaaataac aatctttctg gctcccttcc taactcttgg
120

ggtgggaatt ccaagaatgg cttcttttagg cttcaaaaatt tgatcctaga tcataacttt
180

ttcactgggtg acgttcctgc ttctttgggt agcttaagag agctcaatga gatttcctt
240

agtcataata agtttagtgg agctatacca aatgaaatag gaaccctttc taggcttaag
300

acacttgaca tttctaataa tgccttgaat gggaacttgc ctgctaccct ctctaattta
360

tctcactta cactgctgaa tgcagagAAC aacctccttg acaatcaaAT cctcaaagt
420

ttaggtagat tgcgtaatct ttctgttctg attttgagta gaaaccaatt tagtggacat
480

attccttcaa gcattgcaaa catttcctcg cttaggcagc ttgatttgtc actgaataat
540

ttcaggggga gaaattccag tctcctttga cagtcagcgc aagtctaaat ctcttcaatg
600

gttcctacaa tagcctctca nggtctgncc cccctctgct tgncaagaaa ttaactcaag
660

ctcatttggtg ggaaatatcc aactatgnng gacaggcctt caacccatgt ttttccaagc
720

ttcatacaag gagtaatggc ct
742

<210> 97

<211> 716

<212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 97
 ggacagaaaa aggagtcctt ccagttgctg gtggtgatgt tgaagcaggt ggggaggctg
 60

 gagggaaact agtccatttt gatggaccaa tggcttttac agctgatgat ctcttggtg
 120

 caacagctga gatcatggga aagagcacct atggaactgt ttataaggct attttggagg
 180

 atggaagtca agttgcagta aagagattga gggaaaagat cactaaagggt catagagaat
 240

 ttgaatcaga agtcagtgtt ctaggaaaaa ttagacaccc caatgttttg gctctgaggg
 300

 cctattactt gggacccaaa ggggaaaagc ttctggtttt tgattacatg tctaaaggaa
 360

 gtcttgcttc tttcctacat ggtaagtttc gtgtgctgnt ctttcattaa agtgntgggn
 420

 gggctggtct ttaattataa tttggagttt taccttanta atctgtataa ttctaactcg
 480

 agacaagtca aacaaaaacc ctaaggaaca acnccttanc tttaatatnc catatcaata
 540

 angngaatta tttnttgggt tcatttgatg cngggggng gnacntnaaa cnttnatttg
 600

 ntgggccacn anggnnnnaa aannncacaa ananttggnc cngnggnttn gnnntgcctt
 660

 tantnccang anaaacatna tacanggnan ctnnctcnn naangtnntn gttngn
 716

<210> 98
 <211> 616
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 98
 ggacagaaaa aggagtcctt ccagttgctg gtggtgatgt tgaagcaggt ggggaggctg
 60

 gagggaaact agtccatttt gatggaccaa tggcttttac agctgatgat ctcttggtg
 120

caacagctga gatcatggga aagagcacct atggaactgt ttataaggct attttggagg
180

atggaagtca agttgcagta aagagattga gggaaaagat cactaaagggt catagagaat
240

ttgaatcaga agtcagtgtt ctaggaaaaa ttagacaccc caatgttttg gctctgaggg
300

cctattactt gggacccaaa ggggaaaagc ttctggtttt tgattacatg tctaaaggaa
360

gtcttgcttc tttcctacat ggtaagtttc gtgtgctgtt ctttcattaa gtgttggtg
420

tgctgttctt taattataat ttggagnttt accttagtaa tctgtataat tctaatacga
480

gaacagtcaa acaaaacacc taaggaacaa caccttagct ttaatatcca tatcaataag
540

tgaatatttt cttggtcac c ttgatgcagg ngngngaact tgaacaatca ttgattggnc
600

caccanggat gaaaat
616

<210> 99

<211> 532

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 99

actggctgtg actgatctct ctggtctaata ctcttccagc tgctggagaa cttgatgaac
60

ttctggtcgt gctgatggag aaggatcaac acagtgcaaa gcgagcttca acgtgttttag
120

caactcgtcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaa cctcatttgt
180

ccactcctct ttgacaactg aggcaacca ctgaggcaaa tctagtccat tcatagacac
240

cccaggtgat ttctcgtta ggagttctaa caagataaca ccaagactgt agatatcagt
300

tttagtgttt gctttcttga gctttgagag ctcagggtgcc cggtatccca atgctccagc
360

tgtagctatc acgttggaaat tagcagcagt tgacatcaac cgagaaagac caaaatctgc
420

aatttttagca tttgtattct catcaagcaa cacattgctg gatgtgaggt tcccatgtat
480

gatgttctcc tgggaatgaa ggcggaacaa gccacgggcc aagtcttgctg ct
532

<210> 100

<211> 568

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 100

tatgaggaca gaaanttnag tccctccagt tgctgggtggt gatgttgaag cagggtgggga
60

ggctggaggg aaactagtcc attttgatgg accaatggct tttacagctg atgatctctt
120

gtgtgcaaca gctgagatca tgggaaagag cacctatgga actgtttata aggctatatt
180

ggaggatgga agtcaagttg cagtaaagag attgagggaa aagatcacta aaggatcatag
240

agaatttgaa tcagaagtca gtgttctagg aaaaattaga caccccaatg ttttggctct
300

gagggcctat tacttgggac ccaaagggga aaagcttctg gtttttgatt acatgtctaa
360

aggaagtctt gcttctttcc tacatggtaa gtttcgtgtg ctgttctttc attaagtgtt
420

gtgtgtgctg ttctttaatt ataatttga gttttacctt agtaatctgt ataattctaa
480

tcggagaaca gtcaaacaaa aaccctaagg aacacacctt actttaatat accatatcaa
540

taagngaatn atttcttggt catcttga
568

<210> 101

<211> 678

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 101

ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
60

agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat
300

atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc
360

tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaa
420

atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc
480

atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttngtctatt
540

ttcatccttg ttggccaatc aatgaatggg tcaagttccc cacctgcac cagatgaaca
600

agaaaataat tcacttaatg gatatggnat attaaagcta aggggtgggc cntaggggtt
660

ttgggttgnc cng
673

<210> 103

<211> 665

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 103

ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
60

atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt
120

gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
180

atttgtccac tcctctttga caactgaggc aaccactga ggcaaattcta gtccattcat
240

agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat
300

atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc
360

tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaa
420

atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc
480

atgtatgatg tctnctggga atgaaggcan aacaagccac ggccaagtct tgggctattt
540

tcaccccttgt ggncaatcaa tgaatgggta anttcccccc ctgcttcaag atgaacaaga
600

aaataattca cttattgggtt gggntatnaa actaaggggn gncctagggt gnttngntgn
660

ccnct
665

<210> 104

<211> 671

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 104

ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
60

atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt
120

gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
180

atttgtccac tcctctttga caactgaggc aaccactga ggcaaatacta gtccattcat
240

agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat
300

atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc
360

tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa
420

atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgagggtccc
480

atgtatgatg ttctcctggg aatgaaggca gaacaagcca cggccaagtc ttgngctatt
540

ttcatccttg gtggccaatc aatgaatggt tcagttccac cacctgcac aagatgaaca
600

agaaaataat tcacttattg atatgggata ttaaagctaa ggggtgggtc ntaggggggtt
660

tngntgncc c
671

<210> 105

<211> 670

<212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 105
 ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
 60

 atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt
 120

 gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
 180

 atttgccac tctcttttga caactgaggc aaccactga ggcaaatacta gtccattcat
 240

 agacacccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat
 300

 atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc
 360

 tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagaccaa
 420

 atctgcaatt ttagcatttg tantctcatc aagcaacaca ttgctggatg tgagggtccc
 480

 atgtatgatg tcctcctggg aatgaaggca gaacaagcca cgggccaaagt cttgggctat
 540

 tttcatcctt ggtggggccaa tcaatgaatg gttcaanttc ancacctgcn tcaagangaa
 600

 caagaaaata attncntatg gnnnggatat naaactaagg ggnggnccta ggggtntngn
 660

 nngnccggcn
 670

 <210> 106
 <211> 662
 <212> DNA
 <213> soybean
 <220>
 <221> misc_feature
 <223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)
 <400> 106
 ggtgggactg gctgtgactg atctctctgg tctaattctt tccagctgct ggagaacttg
 60

 atgaacttct ggtcgtgctg atggagaagg atcaacacag tgcaaagcga gcttcaacgt
 120

gtttagcaac tcgtcgccaa ctgtggatgc atctctcatc aagtctgcat caaaaacctc
180

at ttgtccac tctctttga caactgaggc aaccactga ggcaaata gtcattcat
240

agacaccca ggtgatttcc tcgttaggag ttctaacaag ataacaccaa gactgtagat
300

atcagtttta gtgtttgctt tcttgagctt tgagagctca ggtgcccggg atcccaatgc
360

tccagctgta gctatcacgt tggaattagc agcagttgac atcaaccgag aaagacaaaa
420

atctgcaatt ttagcatttg tattctcatc aagcaacaca ttgctggatg tgaggttcca
480

tgtatgatgt tctnctggga atgaaggcag aacaagccac gggccaagtc ttngnctatt
540

tcctccttgt gggcaatcaa tgaatgttta anttcncac ctgcttnaga ggaccaagaa
600

aanattactt attggntggg tattaaagct aagggggggn cctaaggggn tttggnnngc
660

cc
662

<210> 107

<211> 792

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 107

tatttacaac tagtgttatc ggagaatgaa aaattgaaga ataataagtt cagctataat
60

aaactcgagg gaggaataac aaagaaattc atgataaata gatataactt attaaattta
120

aggggtgtat ttgcacaccc tgaattatag agattcttat atctttgaga aaataattaa
180

attgggaaaa aagagataat gactgattga gatttgcttc agaattgttc gttttaatat
240

tggtacgaat ctaatggntt taccctgaaa gatgctcaca agtattgagg gactaataaa
300

ttgnttataa actactacta aatgagatga gactttaagg ngactgaag caatatcatt
360

taaaaaatga ctactcgcat ttgngttgag aaaatttatt ttcatgaaag naaattttnt
420

ccnttttang ataaagccat ttnncttaac cnnangggga nataaaatgg cccccnttca
480

taaaaaacct accanctata taaatggatn tataccaacc ttcctangca ccatgccatt
540

gggatnggng gaattaaatt naaaangntt gcnttggaat gggtaaaaaa ttccaaaact
600

tnaaccnccn ccacaatttt agtggccacn gnaatattnn ttanccgntg gncttttttc
660

caggaaaacg acccgtaacc aaangggggn aaaagggaaa gggagatgga ttgcntgnng
720

gtntgaggct catcccnatt cccaaacatg ttnggggnccc aaaaccgaag tncccttgga
780

ccatggatgn cn
792

<210> 108

<211> 573

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 108

gggactggct gtgactgatc tctctggtct aatctcttcc agctgctgga gaacttgatg
60

aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt
120

tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt
180

tgtccactcc tctttgacaa ctgaggcaac cactgaggc aaatctagtc cattcataga
240

caccccaggt gatttctctg ttaggagttc taacaagata acaccaagac tgtagatata
300

agtttttagtg tttgctttct tgagctttga gagctcaggt gcccggtatc caatgctcca
360

gctgtagcta tcacgttgga attagcagca gttgacatca acccgagaaa gacccaaaatt
420

gcaatttagc anttgnattc ttatnaacaa cacaatgggt ggatgngang gtnccaagga
480

ttgangtttt ctgggaatga aaggganaaa caagccccgg gccaaagntt ggggttattt
540

tnaancctgg ngggncaaan aaangaaagg ttn
573

<210> 109

<211> 673

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 109

gggactggct gtgactgac tctctgggtct aatctcttcc agctgctgga gaacttgatg
60

aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt
120

tagcaactcg tcgccaactg tggatgcatc tctcatcaag tctgcatcaa aaacctcatt
180

tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
240

caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgtagatata
300

agtttttagtg tttgctttct tgagcttttg agaagctcag gtgcccggta tcccaaagtgc
360

ttccagctgt agcttatcac cggtgggaat taagcagcaa gttggacatt caacccggag
420

naaaagaccc aaaaattttg caaattttta agcaatttng gnantttctn aatcaaggcc
480

aaccaccaat tggnttggga atggtggaag ggtttcccca atggtaattg gaagggtttc
540

ttccctnngg gaaaatggaa aggggcaana aaacaaaggc ccaacnnggg ccccaaaggc
600

nttttggggg cttatttttt tncnaatncc ctttggnnng ggncccaaata tcnaaantgg
660

aaattggntt tnn
673

<210> 110

<211> 564

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 110

actggctgtg actgatctct ctggtctaata ctcttcacagc tgctggagaa cttgatgaac
60

ttctggtcgt gctgatggag aaggatcaac acagtgcata gcgagcttca acgtgtttag
120

caactcgtcg ccaactgtgg atgcatctct catcaagtct gcatcaaaaa cctcatttgc
180

ccactcctct ttgacaactg aggcaacca ctgaggcaaa tctagtccat tcatagacac
240

cccagtgat ttctctgtta ggagttctaa caagataaca ccaagactgt agatatcagt
300

tttagtggtt gctttcttga gctttgagag ctgaggtgcc cggatatcca atgctccagc
360

tgtagctatc acgttggaat tagcagcagt tgacatcaac ccgagaaaga ccaaaatctg
420

caatttttagc atttgatttc tcatcaagca acacattgct ggatgtgagg ttcccatgta
480

tgatgttctc ctgggaatga aggcagaaca agccacggcc aagcttggtt atttcatcct
540

tgtggccaat caatgaatgg tcat
564

<210> 111

<211> 456

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 111

actatgagga cagaaaaagg agtccctcca gttgctggtg gtgatgttga agcgggtggg
60

gaggctggag ggaaactagt ccattttgat ggaccaatgg cttttacagc tgatgatctc
120

ttgtgtgcaa cagctgagat catgggaaag agcacctatg gaactgttta taaggctatt
180

ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggatcat
240

agagaatttg aatcanaagt cagtgttcta ggaaaaatta nacaccccaa tgttttggtt
300

111 456 DNA soybean misc_feature n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP) 111

ntgaggccta ttacttggga cccaaagggg aaaagcttnt ggtttttgat tcatgtntaa
360

aggaagtctt gcttntttcc tacatggnaa gtttcggggc tgtctttnat taanggtngg
420

gngngctggn tttaattata attnggngtt tacctt
456

<210> 112

<211> 592

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 112

actatgagga cagaaaaagg agtccctcca gttgctggtg gtgatgttga agcaggtggg
60

gaggctggag ggaaactagt ccattttgat ggaccaatgg cttttacagc tgatgatctc
120

ttgtgtgcaa cagctgagat catgggaaag agcacctatg gaactgttta taaggctatt
180

ttggaggatg gaagtcaagt tgcagtaaag agattgaggg aaaagatcac taaaggcat
240

agagaatttg aatcagaagt cagtgttcta ggaaaaatta gacaccccaa tgttttggct
300

ctgagggcct attacttggg acccaaaggg gaaaagcttc tggtttttga ttacatgtct
360

aaaggaagtc ttgcttcttt cctacatggt aagtttcgtg tgctgttctt tcattaagtg
420

ttgggtgtgc tggctcttaa ttataatttg gagtttacct tannaatctg gataattcta
480

atcgagaaac agncaaaca aancctaag gaacaaccct tanctttaat atccatatca
540

ataagngaan tatttcttgg tcatcttgat gcaggggggg gnactgaaca tt
592

<210> 113

<211> 460

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 113

gggactggct gtgactgac tctctggtct aatctcttcc agctgctgga gaacttgatg
60

aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt
120

tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt
180

tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
240

caccccaggt gatttcctcg ttaggagttc taacaagata acaccaagac tgtagatata
300

agtttttagtg tttgctttct tgagctttga gagctcaggt gcccggtatc ccaatgcttc
360

agctgtagct atcacgttgg aattagcagc agttgacatc aaccgagaaa gacaaaaatc
420

tgcaatttta gcatttgnat tctcattaaa caacacaatg
460

<210> 114

<211> 566

<212> DNA

<213> soybean

<220>

<221> misc_feature

<223> n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP)

<400> 114

gggactggct gtgactgac tctctggtct aatctcttcc agctgctgga gaacttgatg
60

aacttctggt cgtgctgatg gagaaggatc aacacagtgc aaagcgagct tcaacgtggt
120

tagcaactcg tcgccaactg tggatgcac tctcatcaag tctgcatcaa aaacctcatt
180

tgtccactcc tctttgacaa ctgaggcaac ccactgaggc aaatctagtc cattcataga
240

cnccccaggt gatttcctcg ttaggagttt taacaagata acaccaagac tgtagatata
300

agtttttagtg tttgctttct tgagctttga gagttaaggg ncccggantc ccannntcn
360

agttgnagtt atancgttgg aattagcagn agttgcntca accgaaaaag accaaaaatc
420

gaatttttagc atttgttttt catcaagcaa cacattgntg gatgngaggt cccatgtatg
480

114 566 DNA soybean misc_feature n is an undetermined nucleotide (dATP, dCTP, dGTP, or dTTP) 114

atgtttctcct gggaatgaag gcaaacaagc ccgggccaaag gcttgggcta ttttaatcct
540

tggtggccaa acaatgaaag gttnat
566

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16

<210> 116
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<212> DNA
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16

<210> 117
<211> 22
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22

<210> 118
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<400> 118
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<210> 119
<211> 24
<212> DNA
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<400> 119
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<210> 120
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<212> DNA
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<400> 120



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<211> 20
<212> DNA
<213> soybean
<400> 121
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20
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<212> DNA
<213> soybean
<220>
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60
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acaatatcaag ctgcctaagc gaggaaatgt ttgcaatgct tgaaggaata tgtccactaa
120

attggtttct actcaaaatc agaacagaaa gattacgcaa tctacctaaa ctttgaggga
180

tttgattgtc aaggaggttg ttctctgcat tcagcagtgt aagtgaggat aaattagaga
240

gggtagcagg ca
252

[illegible]